Santa Barbara County
Air Pollution Control District

PERMIT to OPERATE 7250-R7
and
PART 70 OPERATING PERMIT 7250

E&B Natural Resources Management Corporation
South Cuyama Unit

South Cuyama State Designated Oilfield
3 miles southwest of New Cuyama

OPERATOR

E&B Natural Resources Management Corporation

OWNERSHIP

E&B Natural Resources Management Corporation

Santa Barbara County
Air Pollution Control District

June 2, 2008 (APCD Permit to Operate)
June 2, 2008 (Part 70 Operating Permit)

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Abbreviations/Acronyms

AP-42	USEPA's *Compilation of Emission Factors*
APCD	Santa Barbara County Air Pollution Control District
API	American Petroleum Institute
ASTM	American Society for Testing Materials
BACT	Best Available Control Technology
bpd	barrels per day (1 barrel = 42 gallons)
CAM	compliance assurance monitoring
CEMS	continuous emissions monitoring
dscf	dry standard cubic foot
E&B	E&B Natural Resources Management Corporation
EU	emission unit
°F	degree Fahrenheit
FID	facility ID number
FUMP	Fuel Use Monitoring Plan
gal	gallon
gr	grain
Hallador	Hallador Production Company, the previous operator
HAP	hazardous air pollutant (as defined by CAAA, Section 112(b))
H_2S	hydrogen sulfide
I&M	inspection & maintenance
l	liter
lb	pound
lbs/day	pounds per day
lbs/hr	pounds per hour
LACT	Lease Automatic Custody Transfer
LPG	liquid petroleum gas
M	mega (million)
MACT	Maximum Achievable Control Technology
MM	million
MW	molecular weight
NEI	net emissions increase
NG	natural gas
NGL	natural gas liquid
NOV	Notice of Violation
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
O2	oxygen
PERP	Portable Engine Registration Program
ppm(vd or w)	parts per million (volume dry or weight)
psia	pounds per square inch absolute
psig	pounds per square inch gauge
PRD	pressure relief device
PTO	Permit to Operate
RACT	Reasonably Available Control Technology
ROC	reactive organic compounds, same as "VOC" as used in this permit
RVP	Reid vapor pressure
scf	standard cubic foot
scfd (or scfm)	standard cubic feet per day (or per minute)
SIP	State Implementation Plan
SSID	stationary source ID number
STP	standard temperature (60°F) and pressure (29.92 inches of mercury)
THC	Total hydrocarbons
tpy, TPY	tons per year
TVP	true vapor pressure
USEPA	United States Environmental Protection Agency
VE	visible emissions
VOC	volatile organic compounds, also known as "ROC" throughout California
VRS	vapor recovery system

1.0 Introduction

1.1 Purpose

General: The Santa Barbara County Air Pollution Control District (APCD) is responsible for implementing all applicable federal, state and local air pollution requirements which affect any stationary source of air pollution in Santa Barbara County. The federal requirements include regulations listed in the Code of Federal Regulations: 40 CFR Parts 50, 51, 52, 55, 61, 63, 68, 70 and 82. The State regulations may be found in the California Health & Safety Code, Division 26, Section 39000 et seq. The applicable local regulations can be found in the APCD's Rules and Regulations. This is a combined permitting action that covers both the Federal Part 70 permit (*Part 70 Operating Permit 7250*) as well as the State Operating Permit (*Permit to Operate 7250-R7*).

The County is currently designated as a nonattainment area for the state ozone and PM_{10} ambient air quality standards.

Part 70 Permitting: The initial Part 70 permit for the E&B Natural Resources Management Corporation's (E&B) South Cuyama Unit was issued January 28, 1998 in accordance with the requirements of the APCD's Part 70 operating permit program. This permit is the third renewal of the Part 70 permit, and may include additional applicable requirements and associated compliance assurance conditions. Also, this permit incorporates any Part 70 minor modifications since the last renewal, and is being issued as a combined Part 70 and APCD reevaluation permit. The South Cuyama Unit is a part of the E&B stationary source, which is a major source for VOC[1], NO_X and CO. Conditions listed in this permit are based on federally-enforceable rules and requirements. Sections 9.A, 9.B and 9.C of this permit are enforceable by the APCD, the USEPA and the public since these sections are federally-enforceable under Part 70. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit, that part of the permit referred to is federally-enforceable.

Pursuant to the stated aims of Title V of the CAAA of 1990 (i.e., the Part 70 operating permit program), this permit has been designed to meet two objectives. First, compliance with all conditions in this permit would ensure compliance with all federally-enforceable requirements for the facility. Second, the permit would be a comprehensive document to be used as a reference by the permittee, the regulatory agencies and the public to assess compliance.

1.2 Facility Overview

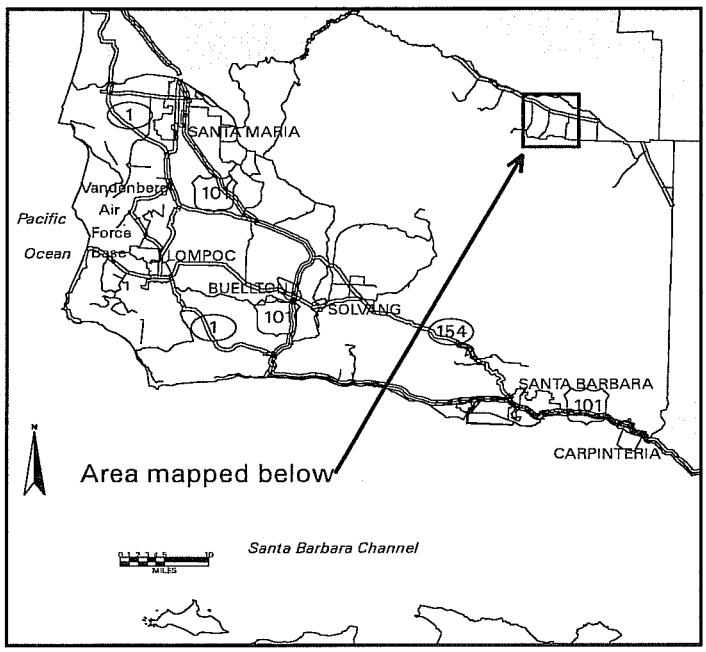
1.2.1 **Facility Overview: E&B Natural Resources Management Corporation (E&B) is the sole owner and operator of the South Cuyama Stationary Source, which includes the South Cuyama Unit.**

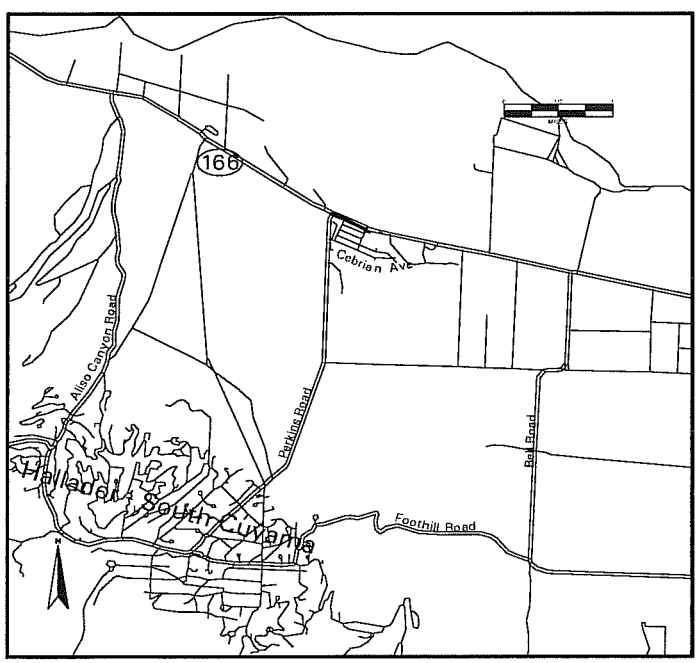
E&B Natural Resources Management Corporation
34740 Merced Avenue
Bakersfield, CA 93308

[1] VOC as defined in Regulation XIII has the same meaning as reactive organic compounds as defined in Rule 102. "ROC" is used in this document, but where used in the context of the Part 70 regulation, it means "VOC".

The South Cuyama Stationary Source, located at the South Cuyama State Designated Oilfield, is 3 miles southwest of the town of New Cuyama. For APCD regulatory purposes, the facility location is in the Northern Zone of Santa Barbara County[2]. Figure 1.1 shows the location of the facility.

Figure 1.1 - Location Map for South Cuyama Stationary Source





[2] APCD Rule 102, Definition: "Northern Zone"

The E&B South Cuyama Stationary Source (SSID 1073) was constructed in the late 1940's and consists of the following facilities:

- South Cuyama Unit (FID 1074)
- Gas Plant 10 (FID 3202)
- Internal Combustion Engines (FID 8916)

The source consists of oil and gas wells and tank batteries where oil is separated from gas and water. The oil is sold and shipped via pipeline from the lease. Produced water is reinjected into the formation. The gas plant removes sulfur compounds and water from the gas and strips out the NGLs. The NGLs are piped to Tank Battery #6 and blended with the produced oil. Dry gas is used for fuel, with residual gas sold to the utility or reinjected into one of the gas injection wells.

This permit covers the South Cuyama Unit and does not include the internal combustion engines (ICEs) and the gas plant. The South Cuyama Unit facility consists of the following:

- Producing Wells
- Injection Wells
- Pipe Lines
- Tank Batteries:
  - Wash Tanks
  - Separators
  - Test Tanks
  - Stock Tanks
  - LACT Tanks
  - Vapor Recovery Systems
  - Petroleum Wastewater Sumps and Pits
  - Tank Heater
  - Wastewater Injection System
  - Plus all accessory equipment
- Facility Support Systems
- Gas Station

Oil, gas and water produced from wells are pumped to one of the tank batteries. Each tank battery is different. Depending on the location, it will have one or more of the following: wash tank, test tank, stock tank, and LACT tank. The incoming fluid enters an inlet separator. Oil and water from the separator flow to a wash tank where water is removed, then to one of the stock/LACT tanks. The oil is pumped through a LACT to a pipeline connection for sales. Some tank batteries have tanks and facilities available to test wells.

Water from the wash tanks flows to one of the water treating tank batteries. At the water treating tank batteries, wastewater enters a second wash tank. The water from the wash tank continues on to one of the two wastewater tanks, and then is re-injected into the formation in one of the water injection wells. Each tank battery has at least one small pit associated with the battery. At the wastewater treating facilities, large post tertiary emergency pits exist.

Some tanks have vapor recovery. The vapor recovery gas is blended with the produced gas and is sent to the gas plant for treating. Gas evolving from the separator at the tank battery is combined with casing gas and is routed to the gas plant (FID # 3202) for dehydration and

removal of sulfur compounds. The South Cuyama Unit is permitted to produce 2,000 barrels of oil per day.

Also included in this permit is a motor vehicle fueling facility consisting of a 12,000 gallon underground gasoline tank with one nozzle equipped with Phase I and Phase II vapor recovery. The Phase I system is an enhanced vapor recovery system.

1.2.2 Facility Permit/New Source Review Overview: Much of the equipment at the South Cuyama Unit was in place and operating before a permit to operate was required. Therefore, much of the equipment was not subject to New Source Review requirements and was issued a Permit to Operate without an Authority to Construct. Table 1.1 provides a summary of the permits issued for this facility since April 2002.

Table 1.1 - Permit History

PERMIT TYPE	ISSUE DATE	DESCRIPTION
Permit to Operate 7250-R5	04/03/02	Facility operating permit.
Authority to Construct 10849	06/23/02	Install a new wash tank, replace a LACT tank and increase throughput at Tank Farm #6.
Authority to Construct 10954	03/13/03	Increased the permitted emissions for the wash tanks and crude storage tanks at Tank Farm #6 to allow blending of Natural Gas Liquids (NGLs) into the produced oil stream, thus increasing the vapor pressure of the processed fluids. The permitted vapor pressure for Tank Farm #6 was increased from 2.64 psia to 8.0 psia.
Part 70 Minor Revision 11005 and Permit to Operate 10849	08/08/03	Convert ATC to PTO
Part 70 Minor Revision 11010 and Permit to Operate 10954	08/18/03	Convert ATC to PTO
Authority to Construct 11136	01/02/04	Upgrade the Phase I vapor recovery at the gas station to enhanced vapor recovery equipment.
Part 70 Minor Revision 11185 and Permit to Operate 11136	08/16/04	Convert ATC to PTO
Transfer of Ownership 7250-01	10/20/04	Ownership transferred from Hallador Production Company to E&B Natural Resources Management Corporation.
Permit to Operate 7250-R6	06/14/05	Facility operating permit.
Authority to Construct 11558	06/24/05	Replace a 1,250 bbl wash tank at Tank Farm #6 with a new 1,250 bbl wash tank.

PERMIT TYPE	ISSUE DATE	DESCRIPTION
Part 70 Minor Revision 11999 and Permit to Operate 11558	04/21/06	Convert ATC to PTO
Authority to Construct 12279	06/22/07	Installation of a new 5,000 bbl wash tank at Perkins Tank Farm #6.
Part 70 Minor Revision 12279 and Permit to Operate 12279	05/27/08	Convert ATC to PTO. Included in Part 70/Reeval 7250-R7.

1.3 Emission Sources

The emissions from the South Cuyama Unit come from oil and gas wells, tanks, vapor recovery systems, sumps and pits, pumps, a tank heater and fugitive emission components, such as valves and flanges. Section 4 of the permit provides the APCD's engineering analysis of these emission sources. Section 5 of the permit describes the allowable emissions from each permitted emissions unit and also lists the potential emissions from non-permitted emission units.

The emission sources include:

- two hundred twenty (220) oil and gas wells, each equipped with a well cellar
- one (1) tank heater
- fugitive emission components, such as valves and flanges
- fifteen (15) tank farms including gas/liquid separators, wash tanks, LACT tanks, stock tanks, test tanks and pits
- one gasoline tank with one nozzle, served by phase I and phase II vapor recovery

A list of all permitted equipment is provided in Section 10.4.

1.4 Emission Control Overview

Air quality emission controls are utilized at the South Cuyama Unit for a number of emission units. Some of the emission controls employed at the facility include:

- Vapor Recovery Systems connected to various wash tanks, LACT tanks, stock tanks, and test tanks,
- An Inspection & Maintenance program for detecting and repairing leaks of hydrocarbons from piping components, i.e., valves, flanges and seals, consistent with the requirements of the APCD Rule 331.
- A tank degassing plan to reduce emissions that would occur while degassing tanks for maintenance.
- A program to keep well cellars and emergency pits pumped out consistent with the requirements of APCD Rule 344

- Phase I and Phase II gasoline dispensing tank vapor recovery systems

1.5 Offsets/Emission Reduction Credit Overview

Decision of Issuance (DOI) 0033 created NO_X, ROC, and CO ERCs from the electrification of the Clark #12 HRA-6T integral gas compressor engine. Refer to Section 1.5 of PTO 8010 for more details. There have been no offsets required for projects at the South Cuyama Unit.

1.6 Part 70 Operating Permit Overview

1.6.1 Federally-enforceable Requirements: All federally-enforceable requirements are listed in 40 CFR Part 70.2 (*Definitions*) under "applicable requirements." These include all SIP-approved APCD Rules, all conditions in the APCD-issued Authority to Construct permits, and all conditions applicable to major sources under federally promulgated rules and regulations. All these requirements are enforceable by the public under CAAA. (*see Tables 3.1 and 3.2 for a list of federally-enforceable requirements)*

1.6.2 Insignificant Emissions Units: Insignificant emission units are defined under APCD Rule 1301 as any regulated air pollutant emitted from the unit, excluding HAPs, that are less than 2 tons per year based on the unit's potential to emit and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit's potential to emit. Insignificant activities must be listed in the Part 70 application with supporting calculations. Applicable requirements may apply to insignificant units. (*See Attachment 10.4)*

1.6.3 Federal Potential to Emit: The federal potential to emit (PTE) of a stationary source does not include fugitive emissions of any pollutant, unless the source is: (1) subject to a federal NSPS/NESHAP requirement, or (2) included in the 29-category source list specified in 40 CFR 51.166 or 52.21. The federal PTE does include all emissions from any insignificant emissions units. (*See Section 5.4 for the federal PTE for this source)*

1.6.4 Permit Shield: The operator of a major source may be granted a shield: (a) specifically stipulating any federally-enforceable conditions that are no longer applicable to the source and (b) stating the reasons for such non-applicability. The permit shield must be based on a request from the source and its detailed review by the APCD. Permit shields cannot be indiscriminately granted with respect to all federal requirements. E&B has not made a request for a permit shield.

1.6.5 Alternate Operating Scenarios: A major source may be permitted to operate under different operating scenarios, if appropriate descriptions of such scenarios are included in its Part 70 permit application and if such operations are allowed under federally-enforceable rules. E&B made no request for permitted alternative operating scenarios.

1.6.6 Compliance Certification: Part 70 permit holders must certify compliance with all applicable federally-enforceable requirements including permit conditions. Such certification must accompany each Part 70 permit application; and, be re-submitted annually on or before March 1st or on a more frequent schedule specified in the permit. A "responsible official" of the owner/operator company whose name and address is listed prominently in the Part 70 permit signs each certification. (*see Section 1.6.9 below)*

1.6.7 Permit Reopening: Part 70 permits are re-opened and revised if the source becomes subject to a new rule or new permit conditions are necessary to ensure compliance with existing rules. The

permits are also re-opened if they contain a material mistake or the emission limitations or other conditions are based on inaccurate permit application data.

1.6.8 MACT/HAPs: Part 70 permits also regulate emission of HAPs from major sources through the imposition of maximum achievable control technology (MACT), where applicable. The federal PTE for HAP emissions from a source is computed to determine MACT or any other rule applicability.

1.6.9 Responsible Official: The designated responsible official and his mailing address is:

Mr. Steve Layton, President
E&B Natural Resources Management Corporation
34740 Merced Avenue
Bakersfield, CA 93308

2.0 Process Description

2.1 Process Summary

Oil, water, and gas are produced from 220 wells. Historically, the API gravity of the crude oil is approximately 31 with a gas oil ratio of approximately 3,000 scf/bbl. Internal combustion engines (PTO 8010) and electric motors provide power to the pumping units. Production may be piped to one of 15 tank farms located throughout the oil field which are used to separate oil, water, and gas from multiple wells. Each tank battery includes one or more wastewater pits, one or more gas/liquid separators, pumps and compressors. Oil is shipped via pipeline to the Pacific Pipeline System LLC's Cuyama facility. Gas is processed at E&B's Gas Plant 10. The dry gas stream is used as fuel, re-injected, and/or sold. The natural gas liquids (NGLs) are piped to Tank Battery #6 and blended with the produced oil. Wastewater is treated at the Machader and Perkins wastewater facilities and re-injected into the producing formation by injection pumps driven by internal combustion engines or electric motors.

2.1.1 Production: The South Cuyama Unit includes 220 oil and gas production wells. Of these wells, approximately 83 are active producers and 136 are shut-in. The producing wells are equipped with artificial lift downhole pumps driven by either natural gas engines or electric motors. The natural gas engines are considered a separate facility and included in a separate permit. Each well is equipped with a well cellar with a diameter of 6 feet. Production is fed into one of two main tank batteries where oil is separated from gas and water. Produced water is re-injected into the lease in one of approximately 20 to 40 injection wells. The production at the South Cuyama Unit is limited to 2,000 bbl per day of dry oil production and 6,000,000 SCF per day of wet gas production pursuant to an application for a PTO Modification received on September 25, 1991. Produced gas is sent directly to Gas Plant 10 (FID 3202, PTO 9136).

2.1.2 Gas, Oil, and Water Separation: The produced oil, gas and water are sent via pipeline to one of 15 tank farms numbered 2 through 19, skipping tank farms numbered 9, 11 and 16. Tank batteries 9 and 16 have vessels that are active. Three of the tanks at three of the tank farms are prohibited from operation because vapor recovery units do not serve them. The oil, gas and water are sent to a liquid/gas separator, which sends the gas to the gas plant, and the oil and water are sent to a wash tank where water is removed. The water from the wash tank is sent to either the Machader or Perkins wastewater treatment plants. The oil from the wash tanks is sent to the stock tanks and then shipped to the Pacific Pipeline System LLC's Cuyama facility through LACT units. Each tank farm has at least one pit. These pits must be maintained in a method consistent with exemptions provided in or requirements set forth in APCD Rule 344.

ROC Control - Most of the tanks that are permitted for use are controlled with vapor recovery units while the rest are exempt from control. Gas collected with the vapor recovery units is blended with produced gas and sent to the gas plant. Fugitive ROC emissions from valves, flanges and piping are reduced through the implementation of an APCD Rule 331-required inspection and maintenance (I&M) program.

2.1.3 Produced/Wastewater Unit: Water received from the wash tanks at the tank farms is sent to either the Machader or Perkins wastewater treatment plants where it is treated through a series of tanks which are exempt from Rule 325 requirements pursuant to the vapor pressure exemption. It is then disposed by re-injecting through water injection wells. Oil recovered from the wastewater plant is sent to an oil recovery tank and then to one of the tanks at one of the tank farms. Both

wastewater treatment plants have emergency pits and post tertiary pits being operated in a manner consistent with or exempt from the requirements of Rule 344. The Perkins wastewater plant has one 1.0 MMBtu/hr tank heater.

2.2 Support Systems

Support units at the South Cuyama Unit consist of the following:

2.2.1 Vapor Recovery Systems: Each tank battery that is in operation is served by a vapor recovery system to collect ROC emissions from tanks. These vapors are scrubbed and compressed. After the compression, the vapors are combined with field gas in the main collection system. Overall ROC control efficiency for the system is 95-percent.

2.2.2 Gas Station: The gas station is located next to the field office. This facility (FID 1956) had a separate permit (PT0 7694) but in 1998 was consolidated into the South Cuyama Unit permit (PTO 7250) in order to streamline the Part 70 permitting process.

2.3 Maintenance/Degreasing Activities

2.3.1 Paints and Coatings: Intermittent surface coating operations are conducted throughout the facility for occasional structural and equipment maintenance needs, including architectural coating. Coating use can range from small to large annual volumes depending on the facility maintenance schedule. Normally only touch-up and equipment labeling or tagging is performed. All architectural coatings used are in compliance with APCD Rule 323.

2.3.2 Solvent Usage: Solvents not used for surface coating thinning may be used at the South Cuyama Unit for daily maintenance operations. Uses include cold solvent degreasing and wipe cleaning with rags.

2.4 Planned Process Turnarounds

Maintenance of critical components is carried out according to the requirements of Rule 331 (*Fugitive Emissions Inspection and Maintenance*). E&B has not listed any emissions from planned process turnarounds that should be permitted.

2.5 Other Processes

2.5.1 Pits: Each tank battery includes at least one pit. The wastewater plants have large post-tertiary pits that are also classified as emergency pits and are used to hold wastewater that has already undergone at least three stages of separation. Post-tertiary pits are exempt from the requirements of Rule 344. The emergency pits are exempt from APCD Rule 344 requirements provided they are used less than 30-days per year. Pits are in use when either receiving or storing petroleum product. All of the pits located at the tank batteries are exempt from Rule 344 because they have a surface area less than 1,000 square feet.

2.5.2 Unplanned Activities/Emissions: E&B does not anticipate or foresee any circumstances that would require use of special equipment and result in excess emissions.

2.6 Detailed Process Equipment Listing

Refer Attachment 10.4 for a complete listing of all permitted equipment.

3.0 Regulatory Review

3.1 Rule Exemptions Claimed

- APCD Rule 202 (*Exemptions to Rule 201*): Rule 202.D.6 requires E&B to maintain a record of each *de minimis* change, which shall include emission calculations demonstrating that each physical change meets the criteria listed in the Rule. Such records shall be made available to the APCD upon request. As of February 26, 2008, the de minimis totals at the E&B South Cuyama Stationary Source are: 10.528 lbs ROC/day.

- APCD Rule 202 (*Exemptions to Rule 201*): The following equipment are exempt from the requirements to obtain an APCD permit. An exemption from permit, however, does not grant relief from any applicable prohibitory rule unless specifically exempted by that prohibitory rule. (see Attachment 10.4 of this permit for a complete equipment list):

  - Abrasive Blasting Unit (Rule 202.H.3)
  - Storage of Drums of Lubrication Oils (Rule 202.V.3)
  - Storage of various types of oils with Initial Boiling Point 300° F or greater (Rule 202.V.1)
  - Painting and Solvent Use for Maintenance Activities (Rule 202.D.8)

  Note: Although the process heater at the Perkins Wastewater Treatment Plant is currently fired by natural gas that meets PUC General Order 58-A which would qualify it for permit exemption, E&B has elected not to claim the permit exemption in order to allow the flexibility to use non-PUC quality gas.

- APCD Rule 321 (*Solvent Cleaning Operations*): Rule 321.B.4 exempts solvent wipe cleaning operations.

- APCD Rule 325 (*Crude Oil Production and Separation*): Section B.1.a exempts tanks processing crude oil having a vapor pressure at the initial tank entry point of less than 0.5 psia. E&B takes advantage of this exemption for the following seven tanks: Machader 100 bbl oil recovery tank, Machader 3,000 bbl wastewater tank, Machader 5,000 bbl wastewater tank, Perkins 2,000 bbl wastewater tank, Perkins 2,000 bbl wastewater tank, and Perkins Hot Water Tank.

- APCD Rule 331 (*Fugitive Emission Inspection and Maintenance*): The following exemptions were applied for in E&B's Inspection and Maintenance Plan and approved by the APCD:

  - Section B.2.b for components buried below the ground.
  - Section B.3.b for components handling liquids or gases with ROC concentrations less than 10-percent by weight.
  - Section B.4 for components that are unsafe to monitor.

- APCD Rule 342 (*Control of Oxides of Nitrogen from Boiler, Steam Generators and process heaters)*: Section A states that boilers, steam generators and process heaters with heat inputs greater than 5 million Btu per hour are subject to the Rule. Thus the Perkins tank heater is exempt from Rule 342.

- APCD Rule 343 (*Petroleum Storage Tank Degassing*): Rule 343 provides an exemption for pressure vessels operated with a normal working pressure of at least 15 psig without vapor loss to the atmosphere provided documentation is provided according to the record keeping and reporting requirements of the rule. In addition the rule provides an exemption for fixed roof tanks without vapor recovery.

- APCD Rule 344 (*Petroleum Sumps, Pits and Well Cellars*): All of the secondary and tertiary pits at the South Cuyama Unit have surface areas less than 1,000 sq. ft., and thus are exempt from this rule based on Section B.4. The post-tertiary pits are exempt from this rule. In addition, Section B.5 provides and exemption for well cellars at wells that have been idle for more than six months prior to inspection.

3.2 Compliance with Applicable Federal Rules and Regulations

3.2.1 40 CFR Parts 51/52 {*New Source Review (Nonattainment Area Review and Prevention of Significant Deterioration)*}: Compliance with APCD Regulation VIII (*New Source Review*), ensures that future modifications to the facility will comply with these regulations.

3.2.2 40 CFR Part 60 {*New Source Performance Standards*: Most of the tanks at South Cuyama Unit were installed prior to the applicability of Subpart K, Kb and Ka. The tanks installed after the applicability dates of the standards are exempt since the size of the tanks in question is under the exemption level for processing that occurs prior to custody transfer.

3.2.3 40 CFR Part 61 {*NESHAP*}: This facility is not currently subject to the provisions of this Subpart.

3.2.4 40 CFR Part 63 {*MACT*}: On June 17, 1999, EPA promulgated Subpart HH, a National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage. This facility currently is not subject to the provisions of this Subpart. The previous operator submitted information in July 2000 indicating its source is exempt from the requirements of MACT based on its 'black oil' production per section 63.760(e)(1) of the subpart. On October 20, 2000 the APCD issued a letter to Hallador agreeing with this exemption.

3.2.5 40 CFR Part 64 {Compliance Assurance Monitoring}: This rule became effective on April 22, 1998. Compliance with this rule is required during the first permit renewal or the next significant permit revision for sources that had initial Part 70 applications deemed complete before April 22, 1998. This rule affects emission units at the source subject to a federally-enforceable emission limit or standard that uses a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds. Compliance with this rule was evaluated and it was determined that no emission units at this facility are currently subject to CAM. All emission units at this facility have a pre-control emission potential less than 100 tons/year.

3.2.6 40 CFR Part 70 {*Operating Permits*}: This Subpart is applicable to the South Cuyama Unit. Table 3.1 lists the federally-enforceable APCD promulgated rules that are "generic" and apply to the facility. Table 3.2 lists the federally-enforceable APCD promulgated rules that are "unit-specific" that apply to the South Cuyama Unit. These tables are based on data available from the

APCD's administrative files and from E&B's Part 70 Operating Permit renewal application filed on December 14, 2007. Table 3.4 includes the adoption dates of these rules.

In its Part 70 permit application, E&B certified compliance with all existing APCD rules and permit conditions. This certification is also required of E&B semi-annually.

3.3 Compliance with Applicable State Rules and Regulations

3.3.1 Division 26. Air Resources {California Health & Safety Code}: The administrative provisions of the Health & Safety Code apply to this facility and will be enforced by the APCD. These provisions are APCD-enforceable only.

3.3.2 California Administrative Code Title 17 Sub-Chapter 6, Sections 92000 through 92530: These sections specify the standards by which abrasive blasting activities are governed throughout the State. All abrasive blasting activities at the South Cuyama Unit are required to conform to these standards. Compliance will be assessed through onsite inspections. These standards are APCD-enforceable only. However, CAC Title 17 does not preempt enforcement of any SIP-approved rule that may be applicable to abrasive blasting activities.

3.4 Compliance with Applicable Local Rules and Regulations

3.4.1 Applicability Tables: In addition to Tables 3.1 and 3.2, Table 3.3 lists the non-federally-enforceable APCD promulgated rules that apply to the South Cuyama Unit. Table 3.4 lists the adoption dates of all rules applicable to this permit at the date of the permit's issuance.

3.4.2 Rules Requiring Further Discussion: During the last three years onsite inspections of this facility have taken place on a routine basis. This section provides a detailed discussion regarding the applicability of and compliance with certain rules.

APCD Rule 201 (*Permits Required*): De –permitted equipment listed in Attachment 10.4 has been removed from service and removed from permit as part of this re-evaluation. Any use of the de-permitted equipment listed in Attachment 10.4 of this permit is subject to Rule 201 and may be subject to NSR.

APCD Rule 210 (*Fees*): Pursuant to Rule 201.G, APCD permits are reevaluated every three years. This includes the re-issuance of the underlying permit to operate. Also included are the PTO fees. The fees for this facility are based the APCD Rule 210, Fee Schedule A. This rule is not federally-enforceable. Attachment 10.3 presents the fee calculations for the reevaluated permit.

APCD Rule 301 (*Circumvention*): This rule prohibits the concealment of any activity that would otherwise constitute a violation of Division 26 (Air Resources) of the California H&SC and the SBCAPCD rules and regulations. To the best of the APCD's knowledge, E&B is operating in compliance with this rule.

APCD Rule 302 (*Visible Emissions*): This rule prohibits the discharge from any single source any air contaminants for which a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade than a reading of 1 on the Ringelmann Chart or of such opacity to obscure an observer's view to a degree equal to or greater than a reading of 1 on the Ringelmann Chart. Sources subject to this rule include: the flare and all diesel-fired piston internal combustion engines at the facility. Improperly maintained diesel engines have the

potential to violate this rule. Compliance will be assured by requiring all engines to be maintained according to manufacturer maintenance schedules and by requiring visible emissions inspections of the flare and diesel engines.

APCD Rule 303 (*Nuisance*): Rule 303 prohibits any source from discharging such quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety or any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Compliance with this rule is assessed through the APCD's enforcement staff's complaint response program. There is no history of complaints regarding nuisances at this facility.

APCD Rule 304 (*Particulate Matter - Northern Zone*): A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grain per cubic foot of gas at standard conditions.

APCD Rule 309 (*Specific Contaminants*): Under Section "A", no source may discharge sulfur compounds and combustion contaminants in excess of 0.2-percent as SO2 (by volume) and particulate matter in excess of 0.3 gr/scf (at 12% CO2) respectively. Sulfur emissions due to the combustion of gas with sulfur content less than 796 ppmv as S will comply with the SO2 limit. The tank heater at the Perkins wastewater treatment plant uses sweetened field gas and thus operates in compliance with this Rule. This tank heater must comply with the fuel sulfur limits in APCD Rule 311 (see below), which keeps the SO_2 emission concentration well below 0.2-percent by volume.

APCD Rule 310 (*Odorous Organic Compounds*): This rule prohibits the discharge of H2S and organic sulfides that result in a ground level impact beyond the property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour.

APCD Rule 311 (*Sulfur Content of Fuels*): This rule limits the sulfur content of fuels combusted at the South Cuyama Unit to 0.5% (by wt) for liquids fuels and 50 gr/100 scf (calculated as H2S) {or 796 ppmvd} for gaseous fuels. Sulfur content (calculated as H2S) of the natural gas used as fuel by E&B usually contains no more than 4 ppmvd. In addition, E&B is required to provide the APCD annually with measured data on sulfur content of fuel used, liquid or gaseous.

APCD Rule 316 (*Storage and Transfer of Gasoline*): The motor vehicle fueling facility is subject to the requirements of Rule 316 which requires CARB-certified Phase I and Phase II vapor recovery system.

APCD Rule 317 (*Organic Solvent*): This rule sets specific prohibitions against the usage of both photochemically and non-photochemically reactive organic solvents (40 lb/day and 3,000 lb/day respectively). Solvents may be used at the South Cuyama Unit during normal operations for degreasing by wipe cleaning and for use in paints and coatings in maintenance operations. There is the potential to exceed the limits under Section B.2 during significant surface coating activities. To demonstrate compliance with this rule, E&B is required to maintain solvent usage records (along with the solvent's MSDS) and submit them annually to the APCD.

APCD Rule 322 (*Metal Surface Coating Thinner and Reducer*): This rule prohibits the use of photochemically reactive solvents for use as thinners or reducers in metal surface coatings. E&B is required to maintain records to ensure compliance with this rule.

APCD Rule 323 (*Architectural Coatings*): This rule sets standards for many types of architectural coatings. The primary coating standard that will apply is for Industrial Maintenance Coatings which has a limit of 340 grams ROC per liter of coating, as applied. E&B will be required to comply with the administrative requirements under Section F for each container at the facility.

APCD Rule 324 (*Disposal and Evaporation of Solvents*): This rule prohibits any source from disposing more that one and a half gallons of any photochemically reactive solvent per day by means that will allow the evaporation of the solvent into the atmosphere. E&B will be required to maintain records to ensure compliance with this rule.

APCD Rule 325 (*Crude Oil Production and Separation*): Most of the tanks at the tank farms and wastewater treatment plants are subject to Section D.1 and all equipment is subject to the produced gas requirements of Section E.1. The rule requires all subject storage tanks to be connected to a vapor collection system and all produced gas to be taken off-site, sold, flared or recovered by a system with a control efficiency of 90-percent, at a minimum. Tanks that are not subject to the Rule 325 Section D.1 include tanks that are not in service as indicated in Section 9.C and seven tanks exempt pursuant to the vapor pressure exemption.

APCD Rule 331 (*Fugitive Emissions Inspection and Maintenance*): The piping components and pumps in hydrocarbon service are subjected to an APCD-approved Inspection and Maintenance (I&M) program. The APCD approved Hallador's Fugitive Emissions I&M Plan on January 21, 1993 and has approved subsequent updates.

APCD Rule 343 (*Petroleum Storage Tank Degassing*): The stock storage tanks are subject to the provisions of this Rule. E&B's compliance plan, required under G, was submitted September 12, 1994, updated September 7, 1995 and approved by the APCD on September 20, 1995. Consequently, E&B is in compliance with this rule.

APCD Rule 344 (*Sumps, Pits and Well Cellars*): Rule 344 requires controls on sumps and pits subject to the rule and an inspection and maintenance plan for well cellars. E&B has instituted a program to monitor well cellars and pump them out if the thickness of the oil/petroleum products exceeds 2 inches or the cellar if over 50-percent full of any liquid. Compliance is determined through required recordkeeping and APCD inspections.

Rule 353 (*Adhesives and Sealants*): This rule applies to the use of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers. Compliance shall be based on site inspections.

Rule 360 (*Emissions Of Oxides Of Nitrogen From Large Water Heaters and Small Boilers*): This rule applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of any new water heater, boiler, steam generator or process heater for use within the APCD with a rated heat input capacity greater than or equal to 75,000 Btu/hour up to and including 2,000,000 Btu/hour. There are no new units at this facility that are subject to this rule.

Rule 361 (*Small Boilers, Steam Generators, and Process Heaters*): This rule shall apply to any boiler, steam generator, and process heater with a rated heat input capacity of greater than 2 million British thermal unit per hour and less than 5 million British thermal unit per hour.

Rule 505 (*Breakdown Conditions*): This rule describes the procedures that E&B must follow when a breakdown condition occurs to any emissions unit associated with this facility. A breakdown condition is defined as an unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment which causes a violation of an emission limitation or restriction prescribed in the APCD Rules and Regulations, or by State law, or (2) any in-stack continuous monitoring equipment, provided such failure or malfunction:

a. Is not the result of neglect or disregard of any air pollution control law or rule or regulation;

b. Is not the result of an intentional or negligent act or omission on the part of the owner or operator;

c. Is not the result of improper maintenance;

d. Does not constitute a nuisance as defined in Section 41700 of the Health and Safety Code;

e. Is not a recurrent breakdown of the same equipment.

3.5 Compliance History

This section contains a summary of the compliance history for this facility and was obtained from documentation contained in the APCD's Administrative file.

This facility was inspected on a routine basis and found to be in compliance with APCD rules and permit conditions during each inspection with the exceptions noted below.

Violations: The table below lists the enforcement actions taken at this facility since E&B Resource Management took over operation of this facility in 2004:

VIOLATION TYPE	NUMBER	ISSUE DATE	DESCRIPTION OF VIOLATION
NOV	8437	10/27/2005	1) Failing to maintain the tank shell of the #2 wash tank at tank farm 6 liquid tight as required by APCD Rule 325 D.4, and 2) Failing to control emissions of produced gas in the form of tank headspace vapors at all times through the use of a properly maintained fixed roof and vapor recovery system.
NOV	8438	10/27/2005	Exceeding the number of major gas leaks from "other" components allowed by Rule 331 Table 1 during an APCD inspection
NOV	8572	08/17/2006	Exceeding the number of major gas leaks from "other" components allowed by Rule 331 D.1.
NOV	8897	06/14/2007	Gross Failure of static leak decay test

VIOLATION TYPE	NUMBER	ISSUE DATE	DESCRIPTION OF VIOLATION
NOV	9029	01/30/2008	An open-ended line was observed in service from the gas gathering liquid knockout scrubber located near SCU Well 45-6. The open-ended line discharges liquids from the scrubber to the well cellar of Well 45-6. NOV 9029 also documents a violation of Rule 344 D.3.a by failing to collect liquids discharged directly into the well cellar in a closed container.
NOV	9030	01/30/2008	Two separate violations of Rule 325 E were observed at the roof/tank shell seams of the two separate crude oil storage tanks located at Tank Farm #6 and Tank Farm #18.

Table 3.1 - Generic Federally-Enforceable APCD Rules

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 101: Compliance by Existing Installations	All emission units	Emission of pollutants
RULE 102: Definitions	All emission units	Emission of pollutants
RULE 103: Severability	All emission units	Emission of pollutants
RULE 201: Permits Required	All emission units	Emission of pollutants
RULE 202: Exemptions to Rule 201	Applicable emission units, as listed in form 1302-H of the Part 70 application.	Insignificant activities/emissions, per size/rating/function
RULE 203: Transfer	All emission units	Change of ownership
RULE 204: Applications	All emission units	Addition of new equipment of modification to existing equipment.
RULE 205: Standards for Granting Permits	All emission units	Emission of pollutants
RULE 206: Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
RULE 207: Denial of Applications	All emission units	Applicability of relevant Rules
RULE 208: Action on Applications – Time Limits	All emission units. Not applicable to Part 70 permit applications.	Addition of new equipment of modification to existing equipment.
RULE 212: Emission Statements	All emission units	Administrative
RULE 301: Circumvention	All emission units	Any pollutant emission
RULE 302: Visible Emissions	All emission units	Particulate matter emissions

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 303: Nuisance	All emission units	Emissions that can injure, damage or offend.
RULE 304: Particulate matter – Northern Zone	Each PM Source	Emission of PM in effluent gas
RULE 309: Specific Contaminants	All emission units	Combustn.contaminant emission
Rule 310: Odorous Organic Sulfides	All emission units	Combustn.contaminant emission
RULE 311: Sulfur Content of Fuel	All combustion units	Use of fuel containing sulfur
RULE 317: Organic Solvents	Emission units using solvents	Solvent used in process operations.
RULE 321: Solvent Cleaning Operations	Emission units using solvents.	Solvent used in process operations.
RULE 322: Metal Surface Coating Thinner and Reducer	Emission units using solvents.	Solvent used in process operations.
RULE 323: Architectural Coatings	Paints used in maintenance and surface coating activities.	Application of architectural coatings.
RULE 324: Disposal and Evaporation of Solvents	Emission units using solvents.	Solvent used in process operations.
RULE 353: Adhesives and Sealants	Emission units using adhesives and solvents.	Adhesives and sealants used in process operations.
RULE 505.A, B1, D: Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
RULE 603: Emergency Episode Plans	Stationary sources with PTE greater than 100 tpy	E&B South Cuyama is a major source.
REGULATION VIII: New Source Review	All emission units	Addition of new equipment of modification to existing equipment. Applications to generate ERC Certificates.
REGULATION XIII (RULES 1301-1305): Part 70 Operating Permits	All emission units	E&B South Cuyama is a major source.

Table 3.2 - Unit-Specific Federally-Enforceable APCD Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
RULE 316: Storage and Transfer of Gasoline	Gas Station	Operation of a motor vehicle fueling facility at the facility.
RULE 325: Crude Oil Production and Separation	Wash tank, crude storage tanks, wastewater tanks	Pre-custody transfer oil service tanks with capacities exceeding

		exemption limits.
RULE 331: Fugitive Emissions Inspection & Maintenance	All components (valves, flanges, seals, compressors and pumps) used to handle oil and gas:	Components emit fugitive ROCs. ID# 6-1
RULE 343: Petroleum Storage Tank Degassing	Wash tank, crude storage tanks, wastewater tanks	Tanks used in storage of organic liquids with vapor pressure > 2.6 psia.
RULE 344: Petroleum Wells, Sumps and Cellars	Well cellars, sump, wastewater pits	Each well at this facility is equipped with a well cellar. Compliance with this rule provides a 70% reduction in well cellar ROC emissions. This rule also provides exemptions to sumps at this facility.
Rule 360: Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	Water heaters, boilers, steam generators or process heaters with a rated heat input capacity greater than or equal to 75,000 Btu/hour up to and including 2,000,000 Btu/hour.	Any new equipment item covered by this rule must certify compliance with the rule emission limits.

Table 3.3 - Non-Federally-Enforceable APCD Rules

Requirement	Affected Emission Units	Basis for Applicability
RULE 210: Fees	All emission units	Administrative
RULE 212: Emission Statements	All emission units	Administrative
RULE 310: Odorous Org. Sulfides	All emission units	Emission of organic sulfides
RULE 361: Small Boilers, Steam Generators, and Process Heaters.	Any boiler, steam generator, and process heater with a rated heat input capacity greater than 2 MMBtu/hr and less than 5 MMBTU/hr.	Any equipment item covered by this rule must comply with the rule emission limits.
RULES 501-504: Variance Rules	All emission units	Administrative
RULE 505.B2, B3, C, E, F, G: Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
RULES 506-519: Variance Rules	All emission units	Administrative

Table 3.4 - Adoption Dates of APCD Rules Applicable at Issuance of Permit

Rule No.	Rule Name	Adoption Date
Rule 101	Compliance by Existing Installations: Conflicts	June 1981
Rule 102	Definitions	May 20, 1999

Rule No.	Rule Name	Adoption Date
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	April 17, 1997
Rule 202	Exemptions to Rule 201	April 17, 1997
Rule 203	Transfer	April 17, 1997
Rule 204	Applications	April 17, 1997
Rule 205	Standards for Granting Permits	April 17, 1997
Rule 206	Conditional Approval of Authority to Construct or Permit to Operate	October 15, 1991
Rule 208	Action on Applications - Time Limits	April 17, 1997
Rule 212	Emission Statements	October 20, 1992
Rule 301	Circumvention	October 23, 1978
Rule 302	Visible Emissions	June 1981
Rule 303	Nuisance	October 23, 1978
Rule 304	Particulate Matter – Northern Zone	October 23, 1978
Rule 309	Specific Contaminants	October 23, 1978
Rule 310	Odorous Organic Sulfides	October 23, 1978
Rule 311	Sulfur Content of Fuels	October 23, 1978
Rule 316	Storage and Transfer of Gasoline	April 17, 1997
Rule 317	Organic Solvents	October 23, 1978
Rule 321	Solvent Cleaning Operations	September 18, 1997
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323	Architectural Coatings	November 15, 2001
Rule 324	Disposal and Evaporation of Solvents	October 23, 1978
Rule 325	Crude Oil Production and Separation	January 18, 2001
Rule 331	Fugitive Emissions Inspection and Maintenance	December 10, 1991
Rule 343	Petroleum Storage Tank Degassing	December 14, 1993
Rule 344	Petroleum Sumps, Pits and Well Cellars	November 10, 1994
Rule 353	Adhesives and Sealants	August 19, 1999

Rule No.	Rule Name	Adoption Date
Rule 360	Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	October 17, 2002
Rule 361	Small Boilers, Steam Generators, and Process Heaters	January 17, 2008
Rule 505	Breakdown Conditions (Section A, B1 and D)	October 23, 1978
Rule 603	Emergency Episode Plans	June 15, 1981
Rule 801	New Source Review	April 17, 1997
Rule 802	Nonattainment Review	April 17, 1997
Rule 803	Prevention of Significant Deterioration	April 17, 1997
Rule 804	Emission Offsets	April 17, 1997
Rule 805	Air Quality Impact and Modeling	April 17, 1997
Rule 806	Emission Reduction Credits	April 17, 1997
Rule 901	New Source Performance Standards (NSPS)	May 16, 1996
Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	October 23, 1993
Rule 1301	General Information	January 18, 2001
Rule 1302	Permit Application	November 9, 1993
Rule 1303	Permits	January 18, 2001
Rule 1304	Issuance, Renewal, Modification and Reopening	January 18, 2001
Rule 1305	Enforcement	November 9, 1993

4.0 Engineering Analysis

4.1 General

The engineering analyses performed for this permit were limited to the review of:

- facility process flow diagrams
- emission factors and calculation methods for each emissions unit
- emission control equipment (including RACT, BACT, NSPS, NESHAP, MACT)
- emission source testing, sampling, CAM
- process monitors needed to ensure compliance

Unless noted otherwise, default ROC/THC reactivity profiles from the APCD's "*VOC/ROC Emission Factors and Reactivities for Common Source Types*" dated 7/13/98 (ver 1.1) was used to determine non-methane, non-ethane fraction of THC.

4.2 Stationary Combustion Sources

The only stationary combustion source at the South Cuyama Unit is one (1) tank heater at the Perkins wastewater treatment plant.

External Combustion Units: The only external combustion unit is the 1.00 MMBtu/hour tank heater (Device #000631). This unit is rated below 5 MMBtu/hr input and exempt from Rule 342 emission standards. The units are subject to Rule 309 requirements; however, the use of gas (at 796 ppm calculated as H_2S) as fuel satisfies the Rule 309 emission limits. The emission factors for all the pollutants, e.g., NO_X, ROC, CO and PM are based on USEPA AP-42, Section 1.4, Fifth Edition, November 1995. Sulfur oxide emissions are based on mass balance calculations. The calculation methodology is the same for all the units and follows below (see also Section 10.1):

$$ER = [(EF \times SCFPP \times HHV) \div 10^6]$$

where:

ER =	Emission rate (lb/period)
EF =	Pollutant specific emission factor (lb/MMBtu)
SCFPP =	gas flow rate per operating period (scf/period)
HHV =	gas higher heating values (1050 Btu/scf)

4.3 Fugitive Hydrocarbon Sources

Emissions of reactive organic compounds from piping components (e.g., valves and connections), pumps, compressors and pressure relief devices have been quantified using emission factors pursuant to APCD P&P 6100.060 (*Calculation of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for Revised ROC Definition*).

An emission control efficiency of 80-percent is credited to all components that are safe to monitor (as defined per Rule 331) due to the implementation of an APCD-approved I&M program for leak detection and repair consistent with Rule 331 requirements. Unsafe to monitor components are not eligible to receive I&M control credit. Ongoing compliance is determined in the field by inspection with an organic vapor analyzer and verification of operator records.

4.4 Tanks/Vessels/Sumps/Separators

4.4.1 Crude Oil Storage and Oil-Water Separation Tanks: The South Cuyama Unit utilizes twenty-one fixed roof tanks ranging in size from 100 bbl to 2,000 bbl for separation of oil and water and for crude oil storage. One tank at the facility (Tank Farm 17 test tank (tank 0027)) is not permitted to operate until it is connected to vapor recovery. Three additional tanks are not connected to vapor recovery as E&B has claimed the exemption allowed in Rule 325.B.1.a for tanks processing crude oil having a vapor pressure at the initial tank entry point less than 0.5 psia. These tanks are the Machader 100 bbl oil recovery tank (tank 0036), the Machader 2,000 bbl wash tank (tank 0035) and the Perkins Hot Water Tank (tank 0377). The remaining seventeen tanks are connected to vapor recovery.

Please see the equipment list in Section 10 and the emission calculation tables in Section 5 for more details regarding the tanks. Emissions from these tanks are calculated using USEPA AP-42, Chapter 7 - *Liquid Storage Tanks* (5th Edition, 2/96). Attachment 10.2 contains emission spreadsheets showing the detailed calculations for each of these tanks. The TVP of the oil and the throughput of each tank may vary from year to year, but the emission limits in Table 5.1-3 are fixed. However, compliance with the emission limits will be based on the total combined throughputs (barrels of oil per day) across all tank farms, except tanks and tank farms with individual limits as noted in Section 9.C. Not withstanding the above, individual tank farms must be operated consistent with the design of the vapor recovery system and operate in compliance with Rule 325.

4.4.2 Sumps and Pits: Tank farms 2, 6, 7, 10 and 18 and the Machader and Perkins wastewater plants each have at least one pit to contain spills or to contain wastewater. Fugitive emissions from all of these are uncontrolled. These emissions are estimated based APCD P&P 6100.060 (*Calculation of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for the Revised ROC Definition*). Some of the pits are classified as being in secondary and others are classified as being in tertiary production. Attachment 10.2 contains an emission spreadsheet showing the detailed calculations for all of the pits at the facility.

4.4.3 Waste Water Tanks: The South Cuyama Unit also has four wastewater tanks. Two tanks are located at the Machader Wastewater Plant and two are at the Perkins Wastewater Plant. These four tanks are not connected to vapor recovery as E&B has claimed the exemption allowed in Rule 325.B.1.a for tanks processing crude oil having a vapor pressure at the initial tank entry point less than 0.5 psia. Emissions from these tanks are calculated the same as for sumps and are based on APCD's P&P 6100.060 (*Calculation of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for the Revised ROC Definition*). Attachment 10.2 contains an emission spreadsheet showing the detailed calculations for all four tanks.

4.5 Other Emission Sources

4.5.1 General Solvent Cleaning/Degreasing: Solvent usage (not used as thinners for surface coating) may occur at the facility as part of normal daily operations. The usage includes cold solvent degreasing. Mass balance emission calculations are used assuming all the solvent used evaporates to the atmosphere.

4.5.2 Surface Coating: Surface coating operations typically include normal touch-up activities. Entire facility painting programs are also performed. Emissions are determined based on mass balance

calculations assuming all solvents evaporate into the atmosphere. Emissions of PM/PM_{10} from paint overspray are not calculated due to the lack of established calculation techniques.

4.5.3 Abrasive Blasting: Abrasive blasting with CARB certified sands may be performed as a preparation step prior to surface coating. The engines used to power the compressor may be electric or diesel fired. If diesel fired, permits will be required unless the engine is registered with CARB (E&B uses diesel engine ID# 6404 listed in PTO 8010 or another exempt engine). Particulate matter is emitted during this process. A general emission factor of 0.01 pound PM per pound of abrasive is used (SCAQMD - Permit Processing Manual, 1989) to estimate emissions of PM and PM_{10} when needed for compliance evaluations. A PM/PM_{10} ratio of 1.0 is assumed.

4.5.4 Gas Station: The facility includes a gas station with CARB certified enhanced Phase I (VR Executive Order VR-102-B) and Phase II (VR Executive Order G-70-17-AB) vapor recovery. Emissions occur from working loss at the underground tank, vapor displacement during vehicle fueling, breathing loss of the underground tank and vehicle fueling spillage. Gasoline vapors escape the system during tank loading, vehicle fueling and breathing loss. Permitted emissions are calculated based on CARB emission factors. See Attachment 10.2 for the detailed calculation worksheet.

4.6 Vapor Recovery/Control Systems

The vapor recovery system collects ROC emissions from tanks. These vapors are scrubbed and compressed. After compression, the vapors are combined with field gas in the main gas collection system. Overall ROC control efficiency for the system is 95-percent.

4.7 BACT/NSPS/NESHAP/MACT

None of the emission units at the South Cuyama Unit are subject to best available control technology (BACT) provisions of the APCD. In addition, as described in Section 3.2 none of the emission units are subject to New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, or Maximum Achievable Control Technology requirements.

4.8 CEMS/Process Monitoring/CAM

4.8.1 CEMS: There are no CEMS at this facility.

4.8.2 Process Monitoring: Compliance with the permitted heat input limitations for the tank heater at the Perkins Wastewater Treatment Plant is determined through the use of a fuel use meter. It is important that it is well maintained and calibrated to ensure that the required accuracy and precision of the device is within specifications. The fuel use meter shall be calibrated and maintained in good working order. To implement the calibration and maintenance requirements E&B shall take into consideration manufacturer recommended maintenance and calibration schedules. Where manufacturer guidance is not available, the recommendations of comparable equipment manufacturers and good engineering judgment shall be utilized.

4.8.3 CAM: The South Cuyama Unit is not subject to the USEPA's Compliance Assurance Monitoring (CAM) rule (40 CFR 64) requirements because none of the equipment at the facility emits more that 100 tons/year of NO_X or ROC, or 100 tons/year of CO. This is based on both pre-control and post-control emissions.

4.9 Source Testing/Sampling

Source testing and sampling are required in order to ensure compliance with permitted emission limits, prohibitory rules, control measures and the assumptions that form the basis for issuing operating permits.

At a minimum, the process streams below are required to be sampled and analyzed on a periodic basis, per APCD Rules and standards:

- Fuel Gas: Daily H_2S Draeger tube tests when the Southern California Gas analyzer is down or registering alarm conditions and annual total sulfur analysis by ASTM D-1072 or other method approved by the APCD.

- Produced Oil/Waste Water: *Annual* analysis for API gravity, Reid vapor pressure and temperature.

All sampling and analyses are required to be performed according to APCD approved procedures and methodologies. E&B may rely on the sulfur content monitoring performed by Southern California Gas Company as specified in PTO 9136 as the primary means of measuring fuel gas sulfur content.

4.10 Part 70 Engineering Review: Hazardous Air Pollutant Emissions

Hazardous air pollutant emissions from the different categories of emission units at the South Cuyama Unit are based on emission factors listed in the USEPA's *AP-42 (5th Ed.,11/95 & 6/97)* guideline volumes. Factors listed in *California Air Toxics Emission Factors (April, 1995), (CATEF)* have been used where the *AP-42* does not list the appropriate factors. Finally, if neither *AP-42* nor *CATEF* addresses the applicable HAP emission factors, the HAP emissions are computed based on USEPA's *Air Emission Species Manual, Vol.1 (VOC Species Profiles, 2nd.Ed.,2/90).*

Potential HAP emissions from each emissions unit are computed and listed in Section 5. The emission factors for each emission category are shown in Section 5.

5.0 Emissions

5.1 General

This permit is a reevaluation of Permit to Operate 7250-R6 and the third renewal of Part 70 Operating Permit 7250 (both issued June 14, 2005). In addition, the emissions associated with PTO 9765, for the drilling of two new wells, is included for the calculation of the post-1990 facility Net Emissions Increase.

Section 5.2 details the permitted emissions for each emissions unit. Section 5.3 details the overall permitted emissions for the facility based on reasonable worst-case scenarios using the potential-to-emit for each emissions unit. Section 5.4 provides the federal potential to emit calculation using the definition of potential to emit used in Rule 1301. Section 5.5 provides the estimated HAP emissions from the facility. Section 5.6 (if applicable) provides the estimated emissions from permit exempt equipment and also serves as the Part 70 list of insignificant emissions. Section 5.7 provides the net emissions increase calculation for the facility and the stationary source. The APCD uses a computer database to accurately track the emissions from a facility. Attachment 10.4 contains the APCD's documentation for the information entered into that database.

5.2 Permitted Emission Limits - Emission Units

Each emissions unit associated with the facility was analyzed to determine the potential-to-emit for the following pollutants:

- Nitrogen Oxides (NO_X) [3]
- Reactive Organic Compounds (ROC)
- Carbon Monoxide (CO)
- Sulfur Oxides (SO_X) [4]
- Particulate Matter (PM) [5]
- Particulate Matter smaller than 10 microns (PM_{10})

Permitted emissions are calculated for both short term (daily) and long term (annual) time periods. Section 4.0 (Engineering Analysis) provides a general discussion of the basic calculation methodologies and emission factors used. The reference documentation for the specific emission calculations, as well as detailed calculation spreadsheets, may be found in Section 4 and Attachments 10.1 and 10.2 respectively. Table 5.1-1 provides the basic operating characteristics. Table 5.1-2 provides the specific emission factors. Table 5.1-3 shows the permitted short-term and permitted long-term emissions for each unit or operation. In the table, the last column indicates whether the emission limits are federally-enforceable. Those emissions limits that are federally-enforceable are indicated by the symbol "FE". Those emissions limits that are APCD-only enforceable are indicated by the symbol "A".

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[3] Calculated and reported as nitrogen dioxide (NO_2)

[4] Calculated and reported as sulfur dioxide (SO_2)

[5] Calculated and reported as all particulate matter smaller than 100 μm

5.3 Permitted Emission Limits - Facility Totals

The total potential-to-emit for all emission units associated with the facility were analyzed. This analysis looked at the reasonable worst-case operating scenarios for each operating period. The equipment operating in each of the scenarios are presented below. Unless otherwise specified, the operating characteristics defined in Table 5.1-1 for each emission unit are assumed. Table 5.2 shows the total permitted emissions for the facility.

5.4 Part 70: Federal Potential to Emit for the Facility

Table 5.3 lists the federal Part 70 potential to emit. All project emissions, except fugitive emissions, are counted in the federal definition of potential to emit.

5.5 Part 70: Hazardous Air Pollutant Emissions for the Facility

Total emissions of hazardous air pollutants (HAP) are computed based on the emission factors listed in Table 5.4 for each emissions unit. Potential HAP emissions, based on the worst-case scenario listed in Section 5.3 above, are shown in Tables 5.5-1 through 5.5-3.

5.6 Exempt Emission Sources/Part 70 Insignificant Emissions

Equipment/activities exempt pursuant to Rule 202 include maintenance operations involving surface coating. This facility includes the following permit-exempt equipment with emissions: (Re: APCD Rule 202)

- Abrasive Blasting Unit (Section H.3)
- Storage of Drums of Lubrication Oils (Section V.3)
- Storage of various types of oils with Initial Boiling Point 300° F or greater (Section V.1)

In addition, maintenance operations using paints and coatings contribute to the facility emissions. Table 5.5 lists these exempt emissions units and the expected emissions.

5.7 Net Emissions Increase Calculation

The stationary source net emissions increases since November 15, 1990 (the day the federal Clean Air Act Amendments were adopted) are listed in Table 5.0. This emissions history is relevant for any future modifications.

Table 5.5
Permit to Operate 7250-R7
E&B South Cuyama Unit
APCD Permit Exempt and Part 70 Insignificant Emissions

Estimated Permit Exempt Emissions (lbs/hr)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Particulates from Abrasive Blasting	-	-	-	-	0.01	0.01
Coatings		0.00				
Solvents	-	0.06	-	-	-	-
Storage of Solvents/ Lubricating Oils/etc.	-	0.00	-	-	-	-
Totals	**0.00**	**0.06**	**0.00**	**0.00**	**0.01**	**0.01**

Estimated Permit Exempt Emissions (lbs/day)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Particulates from Abrasive Blasting	-	-	-	-	0.27	0.27
Coatings		0.00				
Solvents	-	1.53	-	-	-	-
Storage of Solvents/ Lubricating Oils/etc.	-	0.00	-	-	-	-
Totals	**0.00**	**1.53**	**0.00**	**0.00**	**0.27**	**0.27**

Estimated Permit Exempt Emissions (Tons/Year)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Particulates from Abrasive Blasting	-	-	-	-	0.05	0.05
Coatings		0.00				
Solvents	-	0.28	-	-	-	-
Storage of Solvents/ Lubricating Oils/etc.	-	0.00	-	-	-	-
Totals	**0.00**	**0.28**	**0.00**	**0.00**	**0.05**	**0.05**

6.0 Air Quality Impact Analyses

6.1 Modeling

Air quality modeling has not been required for this stationary source.

6.2 Increments

An air quality increment analysis has not been required for this stationary source

6.3 Monitoring

Air quality monitoring is not required for this stationary source.

6.4 Health Risk Assessment

The E&B stationary source is subject to the Air Toxics Hot-Spots Program (AB-2588). A health risk assessment (HRA) for the facilities was prepared by the APCD on March 12, 1996 under the requirements of the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588). The HRA is based on 1994 toxic emissions inventory data submitted to the APCD by the previous operator. An earlier HRA, based on 1991 emission data was also prepared by the APCD for Hallador on November 10, 1993.

Based on the 1994 toxic emissions inventory, a cancer risk of 6 per million off the property was estimated for the E&B Stationary Source. This risk is primarily due to emissions of polycyclic aromatic hydrocarbon (PAH) from internal combustion devices. Additionally, a chronic risk of 0.3 and an acute risk of 0.07 have been estimated by the APCD and are mainly due to formaldehyde and acrolein emissions from internal combustion devices. The cancer and non-cancer chronic risk projections are less than the APCD's AB-2588 significance thresholds of 10 in a million and 1.0, respectively. Approximately 4.7 pounds of PAH, 6,000 pounds of formaldehyde and 190 pounds of acrolein were emitted from internal combustion devices in 1994.

The health risk assessment based on the 1991 inventory showed a cancer risk of 5 per million. Emissions of benzene and PAH contributed to a majority of the risk. Chronic and acute non-cancer risks were estimated to be 0.2 and 0.1 respectively in 1991.

7.0 CAP Consistency, Offset Requirements and ERCs

7.1 General

Santa Barbara County is in attainment for the federal ozone standard but is nonattainment for the state ozone ambient air quality standards. In addition, the County is nonattainment with the state PM_{10} ambient air quality standard. Therefore, emissions from all emission units at the stationary source and its constituent facilities must be consistent with the provisions of the USEPA and State approved Clean Air Plans (CAP) and must not interfere with progress towards maintenance of the federal and attainment of the state ambient air quality standards. Under APCD regulations, any modifications at the E&B South Cuyama Stationary Source that result in an emissions increase of any nonattainment pollutant exceeding 25 lbs/day must apply BACT (NAR). Additional increases may trigger offsets at the source or elsewhere so that there is a net air quality benefit for Santa Barbara County. These offset threshold levels are 55 lbs/day for all non-attainment pollutants except PM_{10} for which the level is 80 lbs/day.

7.2 Clean Air Plan

Santa Barbara County's air quality has historically violated both the state and federal ozone standards. Since 1999, however, local air quality data show that every monitoring location in the County complied with the federal one-hour ambient air quality standard for ozone. The Santa Barbara County Air Pollution Control District adopted the 2001 Clean Air Plan (2001 CAP) that demonstrated attainment of the federal one-hour ozone standard and continued maintenance of that standard through 2015. Consequently, on August 8, 2003, the United States Environmental Protection Agency (USEPA) designated Santa Barbara County as an attainment area for the federal one-hour ozone standard.

On June 15, 2004, USEPA replaced the federal one-hour ozone standard with an eight-hour ozone standard for Santa Barbara County and most parts of the country. This eight-hour ozone standard, originally promulgated by USEPA on July 18, 1997, is set at 0.08 parts per million measured over eight hours and is more protective of public health and more stringent than the federal one-hour standard. For the purposes of the federal eight-hour ozone standard, Santa Barbara County has been designated attainment.

On August 16, 2007 the APCD Board adopted the 2007 Clean Air Plan to chart a course of action that will provide for ongoing maintenance of the federal eight-hour ozone standard through the year 2014 as well as the expeditious attainment of the state one-hour ozone standard. These plans have been developed for Santa Barbara County as required by both the 1998 California Clean Air Act and the 1990 Federal Clean Air Act Amendments.

7.3 Offset Requirements

The E&B stationary source does not currently require emission offsets.

7.4 Emission Reduction Credits

Decision of Issuance (DOI) 0033 created NO_X, ROC, and CO ERCs from the electrification of the #12 Clark HRA-6T integral gas compressor engine. See Section 1.5 of PTO 8010-R6.

8.0 Lead Agency Permit Consistency

To the best of the APCD's knowledge, no other governmental agency's permit requires air quality mitigation.

9.0 Permit Conditions

This section lists the applicable permit conditions for the E&B South Cuyama Unit. Section 9.A lists the standard administrative conditions. Section 9.B lists 'generic' permit conditions, including emission standards, for all equipment in this permit. Section 9.C lists conditions affecting specific equipment. Section 9.D lists non-federally-enforceable (i.e., APCD only) permit conditions. Conditions listed in Sections 9.A, 9.B and 9.C are enforceable by the USEPA, the APCD, the State of California and the public. Conditions listed in Section 9.D are enforceable only by the APCD and the State of California. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit, that part of the permit referred to is federally-enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

For the purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this permit, nothing in the permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

9.A Standard Administrative Conditions

The following federally-enforceable administrative permit conditions apply to the facilities of the South Cuyama Unit:

A.1 **Compliance with Permit Conditions:**

(a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and C.

(b) This permit does not convey property rights or exclusive privilege of any sort.

(c) Non-compliance with any permit condition is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or denial of permit renewal. Any permit non-compliance constitutes a violation of the Clean Air Act and its implementing regulations or of APCD Rules or of both, as applicable.

(d) The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for noncompliance with any permit condition.

(e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.

(f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:

(i) compliance with the permit, or
(ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.

[*Re: 40 CFR Part 70.5.(a)(6)(iii), APCD Rules 1303.D.1.j, 1303.D.1.n, 1303.D.1.l, 1303.D.1.k, 1303.D.1.o*]

A.2 **Emergency Provisions:** The permittee shall comply with the requirements of the APCD, Rule 505 (Upset/Breakdown rule) and/or APCD Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the APCD, in writing, a "notice of emergency" within 2 days of the emergency. The "notice of emergency" shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6(g), APCD Rule 1303.F*]

A.3 **Compliance Plan:**

(a) The permittee shall comply with all federally-enforceable requirements that become applicable during the permit term, in a timely manner.

(b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.

[*Re: APCD Rule 1302.D.2*]

A.4 **Right of Entry:** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:

(a) To inspect at reasonable times the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;

(b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;

(c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times.

[*Re: APCD Rule 1303.D.2.a*]

A.5 **Severability:** The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [*Re: APCD Rules 103, 1303.D.1.i*]

A.6 **Permit Life:** The Part 70 permit shall become invalid three years from the date of issuance unless a timely and complete renewal application is submitted to the APCD. Any operation of the source to which this Part 70 permit is issued beyond the expiration date of this Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, §502(a) and 503(d) and of the APCD rules.

The permittee shall apply for renewal of the Part 70 permit not later than 6-months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [*Re: 1304.D.1*]

A.7 **Payment of Fees:** The permittee shall reimburse the APCD for all its Part 70 permit processing and compliance monitoring expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the

source to potential enforcement action by the APCD and the USEPA pursuant to section 502(a) of the Clean Air Act. [*Re: APCD Rules 1303.D.1.p, 1304.D.11 and 40 CFR 70.6(a)(7)*]

A.8 **Prompt Reporting of Deviations:** The permittee shall submit a written report to the APCD documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7-days after discovery of the violation, but not later than 180-days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation, 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to APCD in accordance with Rule 505. *Breakdown Conditions,* or Rule 1303.F *Emergency Provisions.* [APCD Rule 1303.D.1, 40 CFR 70.6(a) (3)]

A.9 **Federally-Enforceable Conditions.** Each federally-enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the APCD-only enforceable section of this permit are federally-enforceable or subject to the public/USEPA review [*Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)*]

A.10 **Reporting Requirements/Compliance Certification:** The permittee shall submit compliance certification reports to both the USEPA and the Control Officer every six-months. These reports shall be submitted on APCD forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year. Supporting monitoring data shall be submitted in accordance with the "Semi-Annual Monitoring/Compliance Verification Report" condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c*]

A.11 **Recordkeeping Requirements**: Records of required monitoring information that includes the following:

(a) The date, place as defined in the permit, and time of sampling or measurements;
(b) The date(s) analyses were performed;
(c) The company or entity that performed the analyses;
(d) The analytical techniques or methods used;
(e) The results of such analyses; and
(f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the APCD upon request. [*Re: APCD Rule 1303.D.1.f, 40CFR70.6(a)(3)(ii)(A)*]

A.12 **Conditions for Permit Reopening:** The permit shall be reopened and revised for cause under any of the following circumstances:

(a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18

months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30-day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.

(b) Inaccurate Permit Provisions: If the APCD or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

(c) Applicable Requirement: If the APCD or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally-enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen and revise/revoke/reissue a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exist.

If a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [*Re: 40 CFR 70.7(f)(1)-(3), 40 CFR 70.6(a)(2)*]]

9.B. Generic Conditions

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally-enforceable. Compliance with these requirements is discussed in Section 3. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

B.1 **Circumvention (Rule 301):** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of APCD Rule 303. [*Re: APCD Rule 301*]

B.2 **Visible Emissions (Rule 302):** The permittee shall not discharge into the atmosphere from any single source of emission or air contaminants for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2.(a) above.

APCD staff certified in visual emission evaluations shall determine compliance. [*Re: APCD Rule 302*].

B.3 **Nuisance (Rule 303):** No pollutant emissions from any equipment at this facility shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [*Re: APCD Rule 303*]

B.4 **Particulate Matter – Northern Zone (Rule 304):** The permittee shall not discharge into the atmosphere, from any source, particulate matter in excess of 0.3 grain per cubic foot of gas at standard conditions. [*Re: APCD Rule 304*]

B.5 **Specific Contaminants (Rule 309):** The permittee shall not discharge into the atmosphere from any single source sulfur compounds, carbon monoxide and combustion contaminants in excess of the standards listed in Sections A and G of Rule 309. [*Re: APCD Rule 309.A.2.b, 309.A.1*].

B.6 **Sulfur Content of Fuels (Rule 311):** The permittee shall not burn fuels with a sulfur content in excess of 0.5% (by weight) for liquid fuels and 796 ppmvd or 50 gr/100 scf (calculated as H_2S) for gaseous fuel. Compliance with this condition shall be based on measurements of the fuel gas using Draeger tubes, ASTM, or other APCD-approved methods and diesel fuel billing records or other data showing the certified sulfur content for each shipment. [*Re: APCD Rule 311.B*]

B.7 **Organic Solvents (Rule 317):** The permittee shall comply with the emission standards listed in Section B of Rule 317. Compliance with this condition shall be based on the permittee's compliance with Condition 9.C.6 of this permit. [*Re: APCD Rule 317.B.2, B.3*]

B.8 **Solvent Cleaning Operations (Rule 321):** The permittee shall comply with equipment and operational standards for process activities using solvents as stipulated in Rule 321. The permittee has stated that, except for routine maintenance involving wipe cleaning, they do not use solvents at the facility. Compliance with this section shall be based on records pursuant to Condition 9.C.6 of this permit. [*Re:* APCD Rule 321 Sections D-L]

B.9 **Metal Surface Coating Thinner and Reducer (Rule 322):** The use of photochemically reactive solvents as thinners or reducers in metal surface coatings is prohibited. Compliance with this condition shall be based on the permittee's compliance with Condition 9.C.6 of this permit and facility inspections. [*Re: APCD Rule 322*]

B.10 **Architectural Coatings (Rule 323):** The permittee shall comply with the emission standards listed in Section D of Rule 323 as well as the Administrative requirements listed in Section F of Rule 323. Compliance with this condition shall be based on the permittee's compliance with Condition 9.C.6 of this permit and facility inspections. [*Re: APCD Rules 323.D.1-3, 317.B, 322, 324*]

B.11 **Disposal and Evaporation of Solvents (Rule 324):** The permittee shall not dispose through atmospheric evaporation of more than one and a half gallons of any photochemically reactive solvent per day. Compliance with this condition shall be based on the permittee's compliance with Condition 9.C.6 of this permit and facility inspections. [*Re: APCD Rule 324*]

B.12 **Emissions Of Oxides Of Nitrogen From Large Water Heaters And Small Boilers (Rule 360)**: The permittee shall comply with the requirements of APCD Rule 360: *Emissions of*

Nitrogen From Large Water Heaters And Small Boilers whenever a new boiler, process heater or other external combustion device is added or an existing unit is replaced.

B.13 **Emergency Episode Plans (Rule 603):** During emergency episodes, the permittee shall implement the APCD approved Emergency Episode Plan. [*Reference APCD Rule 603*]

B.14 **Adhesives and Sealants (Rule 353).** The permittee shall not use adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless the permittee complies with the following:

(a) Such materials used are purchased or supplied by the manufacturer or suppliers in containers of 16 fluid ounces or less; or alternately

(b) When the permittee uses such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353, Section B.1, the total reactive organic compound emissions from the use of such material shall not exceed 200 pounds per year unless the substances used and the operational methods comply with Sections D, E, F, G, and H of Rule 353. Compliance shall be demonstrated by recordkeeping in accordance with Section B.2 and/or Section O of Rule 353. *[Re: APCD Rule 353]*

B.15 **Oil and Natural Gas Production MACT:** The permittee shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage (promulgated June 17, 1999). At a minimum, the permittee shall maintain records in accordance with 40 CFR Part 63, Subpart A, Section 63.10 (b) (1) and (3). Full compliance shall be achieved by no later than June 17, 2002. [*Re:* 40 CFR 63, Subpart HH]

B.16 **CARB Registered Portable Equipment:** State registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the equipment is at the facility. [*Re: APCD Rule 202*]

9.C Equipment Specific Conditions

This section contains non-generic federally-enforceable conditions, including emissions and operations limits, monitoring, recordkeeping and reporting for each specific equipment group. This section may also contain other non-generic conditions.

C.1 **External Combustion Equipment:** There are no federally-enforceable equipment specific conditions associated with the tank heater at the Perkins Wastewater Plant.

C.2 **Fugitive Hydrocarbon Emissions Components:** The following equipment are included in this emissions unit category:

Device #	*Gas/Light Liquid Service Components*
101050	Valves and Fittings
000738	Pumps, Compressors and Wellheads

(a) Emission Limits: There are no federally-enforceable emission limits associated with the fugitive emissions at the South Cuyama Unit.

(b) Operational Limits: Operation of the equipment listed in this section shall conform to the requirements listed in APCD Rule 331.D and E. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition the permittee shall meet the following requirements:

1. The vapor recovery/gas collection (VRGC) system shall be in operation when the equipment connected to the VRGC system at the facility is in use. The VRGC system includes piping, valves, and flanges associated with the VRGC system. The VRGC system shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge-hatches.

2. The permittee shall implement the APCD-E&B I&M Program" (Jan 14, 1993 and subsequent APCD-approved updates).

(c) Monitoring: The equipment listed in this section is subject to all the monitoring requirements listed in APCD Rule 331.F. The test methods in Rule 331.H shall be used, when applicable.

(d) Recordkeeping: All inspection and repair records shall be retained for a minimum of five years. The equipment listed in this section are subject to all the recordkeeping requirements listed in APCD Rule 331.G.

(e) Reporting: On an annual basis, a report detailing the previous twelve-month's activities shall be provided to the APCD in accordance with all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit.

(*Re: APCD Rule 331, 40 CFR 70.6.a.3.(iii)*)

C.3 **Petroleum Storage and Processing Tanks:** The following equipment is included in this emissions category:

Tanks Subject to Federal Requirements					
Device #	Description	Size (bbl)	Device#	Description	Size (bbl)
000587	TF #2: Wash Tank w/VRS	1,250	000617	Hibbard #7: Stock Tank w/VRS	1,000
000588	TF #2: LACT Tank w/VRS	2,000	000618	Hibbard #7: Test Tank w/VRS	500
000586	TF #2: Stock Tank w/VRS	2,000	000766	Hibbard #7: Stock Tank w/VRS	1,000
000589	TF #2: Test Tank w/VRS	1,000	008302	TF #10: Crude Oil Slop Tank w/VRS	2,000
000594	TF #6: Test Tank w/VRS	1,000	000611	TF #17: Test Tank	200
105087	TF #6: Wash Tank w/VRS	1,500	000613	TF #18: Wash Tank w/VRS	1,250
105964	TF #6: Wash Tank w/VRS	1,250	000765	TF #18: LACT Tank w/VRS	2,000
109943	TF #6: Wash Tank w/VRS	5,000	000614	TF #18: Stock w/VRS	2,000
000763	TF #6: LACT Tank w/VRS	1,000	000612	TF #18: Test Tank w/VRS	1,000
000596	TF #6: LACT Tank w/VRS	1,000	000620	Machader: Oil Recovery Tank	100
000616	Hibbard #7: Wash Tank w/VRS	625	008303	Perkins: Hot Water Tank	500

(a) Emission Limits: Mass emission for the tanks listed above shall not exceed the limits listed in Tables 5.1 through 5.3. The federally-enforceable limits are denoted by a "FE" and a reference for the limit right hand column of Tables 5.1-3 and 5.1-4. Compliance with these limits shall be met by meeting the monitoring, recordkeeping and reporting outlined in (d) and (e) below.

(b) Operational Limits:

1. The tanks permitted under an Authority to Construct are also subject to federally-enforceable throughput limits either on a basis of tank farm throughput or individual throughput limits. Those tanks and their respective throughput limits are specified in the table below titled "*Federally-enforceable Throughput Limits.*"

Federally-enforceable Throughput Limits		
Item	**Operation/Throughput Limit**	**ATC**
Tank Farm #6	2,000 BOPD for entire tank farm	10849, 11558
Tank Farm #17	25 BOPD for entire tank farm	7250
Tank Farm #10	365 days/yr, 300 BOPD	9592

2. The true vapor pressure of the blended crude oil and LPG processed at Tank Farm #6 shall not exceed 8.0 psia.

3. All process operations from the equipment listed in this condition shall meet the requirements of APCD Rules 325 Sections D, E, F and G. Rule 325.D requires the tanks to be connected to vapor collection and removal device(s) prior to their operation, and the vapor removal efficiencies to be no less than 90-percent, unless the tank meets one of the exemptions in Section B of Rule 325. The Machader oil recovery tank (Devise ID# 000620) may operate without vapor recovery as long as it remains below the Rule 325 applicability requirement for crude oil having a true vapor pressure less than 0.5 psia: Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

   The tanks listed in the table below titled *"Tanks That Shall Not Operate"* require installation of vapor recovery systems or other equivalent systems. E&B apply for and obtain an Authority to Construct permit prior to operating these tanks.

Tanks That Shall Not Operate		
Device #	**Description**	**Size (bbl)**
000616	TF#7 (Hibbard) Wash Tank	625
000617	TF#7 (Hibbard) Stock Tank	1,000
000766	TF#7 (Hibbard) Stock Tank	1,000
000618	TF#7 (Hibbard) Test Tank	500
000611	TF #17: Test Tank	200

4. Pursuant to Rule 343, Sections D, E, F and G, the permittee shall use a control device, approved in advance by the APCD, when degassing or purging any stationary tanks, vessels, or containers which process odorous sulfur compounds provided the tank is subject to the Rule. These operations shall be conducted with the permittee's tank degassing plan as approved by the APCD on September 20, 1995 and subsequent APCD-approved revisions. A list of all vessels operated by the permittee is provided in Section 10.4 of this permit for reference.

5. The Perkins hot water tank (Devise #008303) must not receive any wastewater that has not previously undergone at least three stages of separation prior to introduction into the tank.

(c) Monitoring: The permittee shall meter the volume of oil processed through Tank Battery #6. Also, the equipment listed in this condition shall be subject to all the monitoring requirements of APCD Rule 325.H. The test methods outlined in APCD Rule 325.G shall be used, when applicable. In addition, the permittee shall, for all degassing events, monitor the volume purged, characteristics of the vapor purged, and control device/method used.

(d) Recordkeeping: The permittee shall record in a log the volumes of oil processed through Tank Battery #6 and the actual number of days that Tank Battery #6 operated per month. Also, the equipment listed in this condition is subject to all the recordkeeping requirements listed in APCD Rule 325.F. In addition, The permittee shall maintain a log of all degassing events, and record all the parameters listed in Condition C.3.(c) above.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit.

[*Re: ATC 10849, ATC 10954, ATC 11558, 40 CFR 70.6(a)(3), APCD Rules 206, 325, 343 and 1303*]

C.4 **Wastewater Tanks, Pits and Well Cellars:** The following equipment is included in this emissions category:

Device #	Description	Device #	Description
000742	TF #2: Pit	000879	Machader WWTP: Pit
000855	TF #2: Wastewater Pits	000762	Perkins WWTP: Pit
000745	TF #6: Wastewater Pit	000877	Perkins WWTP: Pit
000860	TF #6: Wastewater Pits	000880	Perkins WWTP: Pit
000861	TF #7: Pits (Hibbard)	000881	Perkins WWTP: Pit
000746	TF #7: Pit (Hibbard)	000882	Perkins: Wastewater Pit
000748	TF #10: Pit	000883	Perkins WWTP: Wastewater Pit
000863	TF #10: Wastewater Pits	000740	Well Cellars
000755	TF #17: Pit	000759	Perkins: Wastewater Tank
000872	TF #18: Wastewater Pits	000760	Perkins: Wastewater Tank
000756	TF #18: Pit	000875	Machader: Wastewater Tank
000878	Machader WWTP: Pit	101038	Machader: Wastewater Tank

(a) Emission Limits: None of the emission limits associated with the items listed above are federally-enforceable.

(b) Operational Limits: All process operations from the pits and well cellars listed in this section shall meet the requirements of APCD Rule 344, Sections D, E, and F.

The Machader and Perkins wastewater tanks (000759, 000760, 000875 and 101038) qualify for the exemption provided by Rule 325.1.a due to at the initial storage tank entry point of less than 0.5 psia at each facility. These exemptions shall be re-assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

Pursuant to Rule 343, Sections D, E, F and G, the permittee shall use a control device, approved in advance by the APCD, when degassing or purging any stationary tanks, vessels, or containers which process odorous sulfur compounds provided the tank is

subject to the Rule. These operations shall be conducted with the permittee's tank degassing plan as approved by the APCD on September 20, 1995 and subsequent APCD-approved revisions. A list of all vessels operated by the permittee is provided in Section 10.4 of this permit for reference.

(c) Monitoring: The permittee shall inspect the well cellars on a weekly basis to ensure that the liquid depth and the oil/petroleum depth does not exceed the limits in Rule 344.D.3.c. The pits and well cellars listed in this section are subject to all the monitoring requirements of APCD Rule 344.H. The test methods outlined in APCD Rule 344.I shall be used, when applicable. In addition, in accordance with Rule 343.F, the permittee shall monitor and record all applicable parameters for all degassing events.

(d) Recordkeeping: The pits and well cellars listed in this section are subject to all the recordkeeping requirements of Rule 344.G. The wastewater tanks listed in this section are subject to all the recordkeeping requirements listed in APCD Rule 325.F. In addition, the permittee shall maintain a log of all degassing events, and record all the parameters listed in Condition 9.C.4.(c) above.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit. [*Re: 40 CFR 70.6(a)(3), APCD Rules 206, 325, 343, 344 and 1303*]

C.5 **Gas Station:**

Device ID #	101045
Description	Gas Station
Tank	One 12,000 gallon Underground Storage Tank (UST)
Dispenser	Bennett Model No. E443851
Phase I VR Executive Order	VR-102-B
Phase II VR Executive Order	G-70-17-AD

(a) Emission Limits: Facility emissions of reactive organic compounds (ROCs) shall not exceed either 0.12 lbs/day or 0.02 tons/yr. Compliance with this condition will be assessed through compliance with the gasoline throughput limit contained within this permit, and the monitoring of the vapor recovery systems under Sections 9.C.5.b and 9.C.5.c of this permit.

(b) Compliance with State Law: By April 1, 2009 this facility shall have upgraded to Enhanced Vapor Recovery (EVR) Phase II. This includes installing vapor processors, upgrading dispensers and hanging hardware. A complete Authority to Construct application for this upgrade must be submitted to the APCD by January 1, 2009.

Note: The gas station Phase I and Phase II Vapor Recovery Systems (VRS) were permitted under Authority to Construct 11136, therefore the emission limits associated with the gas station are federally-enforceable.

(c) Operational Limits:

1. Throughput Limitations: The overall gasoline throughput shall not exceed 3,000 gallons per month, or 36,000 gallons per year.

2. Facility Condition: Any defective component of the VRS shall be removed from service until it is repaired, replaced, or adjusted as necessary to ensure compliance.

3. Facility Maintenance: The equipment shall be properly maintained and kept in good condition at all times.

4. Vapor Tight Seals: Gauging and/or sampling devices on the tanks shall be equipped with vapor-tight covers which shall be closed at all times except during gauging or sampling.

5. Equipment Operation: Equipment operation shall be conducted in compliance with all data, specifications and assumptions included with the applications and as documented in the APCD's project file. Phase I and Phase II VRS shall be operated in accordance with the applicable California Air Resources Board (ARB) Executive Orders. All operations shall comply with the requirements of APCD Rule 316.

(d) Monitoring: The permittee shall monitor the vapor recovery system on a regular basis to ensure compliance with Condition 9.C.5.b above by doing the following:

1. Routine/Ongoing Operations: The permittee shall conduct and successfully pass routine Static Leak Decay Tests; Dynamic Back Pressure and Liquid Blockage Tests; and any VRS specific tests required in the applicable Executive Orders annually, but not to exceed 400 days between tests, according to the test protocols approved by the ARB.

   In order that the APCD may witness testing, the permittee shall notify the APCD of the planned testing date not less than five (5) business days prior to the testing. All data for each test (including any data showing initial Static Leak Decay and Back Pressure and Liquid Blockage failures) shall be sent to the APCD at 260 San Antonio Road, Suite A, Santa Barbara, CA, 93110 (Attn: E&C Division) within 15-days after successful test completion, using APCD-approved reporting forms (See Attachment B).

   All annual operational tests that do not successfully pass shall be documented by a written report (using the last page of APCD Form ENF-19 and/or ENF-79) of the cause(s) and corrective action(s) taken to eliminate the failure(s). To "successfully pass" a test means that all test results indicate compliance initially, without replacing, adjusting or repairing any equipment, part or item of the VRS. Example: If initial testing indicates a failure, and the equipment is adjusted, retested, and then passes, this is considered a failed test and shall be noted as such in the repair records. Components and/or systems failing these tests shall not be used to dispense or receive gasoline, unless the permittee contacts the APCD and qualifies for Rule 505 "Breakdown" protection for the failed equipment. All failed equipment shall be tagged as "out of order" until repaired.

3. Inspection, Repair, Testing, and Throughput Records: The permittee is responsible to ensure that any person who performs inspections, repairs, or testing of any of the

gasoline dispensing VRS components at this station, including, but not limited to the activities for normal operation and maintenance, performance and/or reverification testing according to ARB protocols, and those following damage to dispensing equipment from a "driveoff" or other kind of damage, shall provide to the permittee all records of such actions in a legible form.

(e) Recordkeeping: The permittee shall record and maintain the following information. This data shall be maintained for a minimum of three (3) years from the date of each entry and made available to the APCD upon request:

1. The monthly and annual gasoline throughput. The annual throughput shall be compiled by summing the monthly totals over a calendar year.

2. Inspection, repair and testing records required by Section 9.C.5.c.3

(f) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition Permit to Operate 7250. [*Re: 40 CFR 70.6(a)(3), APCD Rules 206 and 316*]

C.6 **Solvent Usage:** The following items are included in this emissions unit category: Photochemically reactive solvents, surface coatings and general solvents.

(a) Emission Limits: The following solvent emission limits are federally-enforceable for the entire stationary source:

Solvent Type	lbs/hour	lbs/day
Photochemically Reactive	8 lbs/hour	40 lbs/day
Non-Photochemically Reactive	450 lbs/hour	3,000 lbs/day

(b) Operational Limits: Use of solvents for cleaning/degreasing shall conform to the requirements of APCD Rules 317, 322, 323 and 324. Compliance with these rules shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit and facility inspections.

(i) *Reclamation Plan*: The permittee may submit a Plan to the APCD for the disposal of any reclaimed solvent. If the Plan is approved by the APCD, all solvent disposed of pursuant to the Plan will not be assumed to have evaporated as emissions into the air and, therefore, will not be counted as emissions from the source. The permittee shall obtain APCD approval of the procedures used for such a disposal Plan. The Plan shall detail all procedures used for collecting, storing and transporting the reclaimed solvent. Further, the ultimate fate of these reclaimed solvents must be stated in the Plan.

(c) Monitoring: none

(d) Recordkeeping: The permittee shall record in a log the following on a monthly basis for each solvent used: amount used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed for APCD-approved disposal; whether the solvent is photochemically reactive; and, the resulting emissions to the atmosphere in units of

pounds per month and pounds per day. Product sheets (MSDS or equivalent) detailing the constituents of all solvents shall be maintained in a manner readily accessible to APCD inspection.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities at the entire stationary source shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit.

[*Re: APCD Rules 317, 322, 323, 324 and 1303, PTO 7250, 40 CFR 70.6*]

C.7 **Semi-Annual Monitoring/Compliance Verification Reports:** The permittee shall submit a report to the APCD every six-months to verify compliance with the emission limits and other requirements of this permit. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year, and shall be in a format approved by the APCD. All logs and other basic source data not included in the report shall be available to the APCD upon request. The second report shall also include an annual report for the prior four quarters. The report shall include the following information:

(a) Fugitive Hydrocarbon I&M Data (Only required to be submitted with July through December report):
- inspection summary.
- record of leaking components.
- record of leaks from critical components.
- record of leaks from components that incur five repair actions within a continuous 12-month period.
- record of component repair actions including dates of component re-inspections.

(b) Petroleum Storage and Processing Tanks: All data required by Condition 9.C.3.(d).

(c) Wastewater Tanks, Pits and Well Cellars: All data required by Condition 9.C.4.(d).

(d) Gas Station: Total gasoline throughput on a monthly basis.

(e) Surface Coating and Solvent Usage: On a monthly basis the amount of surface coating/solvent used at the entire stationary source; the percentage of ROC by weight (as applied); the surface coating/solvent density; the amount of solvent reclaimed; whether the surface coating/solvent is photochemically reactive; and, the resulting emissions of ROC and photochemically reactive surface coatings/solvents to the atmosphere in units of pounds per month.

(f) Throughput: The volume of oil produced each month and the number of days that oil was produced through the tank farms.

(g) Emissions: Monthly NO_X and ROC emissions from both permitted and exempt equipment summarized on an annual basis.

[*Re: 40 CFR 70.6(a)(3)(iii), APCD Rules 206 and 331*]

9.D APCD-Only Conditions

The following section lists permit conditions that are not federally-enforceable (i.e., not enforceable by the USEPA or the public). However, these conditions are enforceable by the APCD and the State of California. These conditions have been determined as being necessary to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any of these conditions shall be a violation of APCD Rule 206, this permit, as well as any applicable section of the California Health & Safety Code.

D.1 **Compliance with Permit Conditions:** The permittee shall comply with all permit conditions in Section 9.D.

D.2 **Condition Acceptance:** Acceptance of this operating permit by E&B shall be considered as acceptance of all terms, conditions, and limits of this permit. [Re: APCD Rule 206]

D.3 **Grounds for Revocation:** Failure to abide by and faithfully comply with this permit shall constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.*

D.4 **Reimbursement of Costs**: All reasonable expenses, as defined in APCD Rule 210, incurred by the APCD, APCD contractors, and legal counsel for all activities related to the implementation of Regulation XIII (*Part 70 Operating Permits*) that follow the issuance of this PTO permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210.

D.5 **Access to Records and Facilities:** As to any condition that requires for its effective enforcement the inspection of records or facilities by the APCD or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the APCD. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.

D.6 **Compliance:** Nothing contained within this permit shall be construed to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment.

D.7 **Consistency with Analysis:** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the APCD's project file) and the APCD's analyses under which this permit is issued.

D.8 **Consistency with Federal, State and Local Permits:** Nothing in this permit shall relax any air pollution control requirement imposed on the permittee by any other governmental agency.

D.9 **Heat Input Limits:** The hourly and annual heat input to the Perkins tank heater (Device # 000631) shall not exceed the values shown in the Table below. These limits are based on the design rating of the equipment and the annual heat input values as listed in the permit application. Compliance with this condition shall be based on fuel use. Unless otherwise designated by the APCO, fuel heat content of 1,050 Btu/Scf for the field gas shall be used.

Device #	Equipment	Hourly Input (MMBtu/hr)	Annual Input (MMBtu/yr)
000631	Perkins Tank Heater	1.000	8,760.00

D.10 **Solvent Usage:** The permittee shall comply with the requirements listed below for all solvent usage:

(a) Vessels or containers used for storing materials containing organic solvents shall be kept closed unless adding to or removing material from the vessel or container.

(b) All materials that have been soaked with cleanup solvents shall be stored, when not in use, in closed containers that are equipped with tight seals.

(c) Solvent leaks shall be minimized to the maximum extent feasible or the solvent shall be removed to a sealed container and the equipment taken out of service until repaired. A solvent leak is defined as either the flow of three liquid drops per minute or a discernible continuous flow of solvent.

D.11 **Fugitive Hydrocarbon Emissions:** In addition to requirements specified in Section 9.C, the following requirements are applicable:

(a) Emissions from fugitive hydrocarbon components (e.g., valves and flanges) shall not exceed the emission limits set forth in Table 5.1-3. Compliance with this condition will be determined using the same fugitive hydrocarbon emission calculation methodology as outlined in Section 10.1.

(b) All routine venting of hydrocarbons shall be routed to either a compressor, flare header or other APCD-approved control device.

D.12 **Abrasive Blasting Equipment:** All abrasive blasting activities performed at the facility shall comply with the requirements of the California Administrative Code Title 17, Sections 92000 through 92530.

D.13 **Permitted Equipment:** Only those equipment items listed in Attachment 10.4 are covered by the requirements of this permit and APCD Rule 201.B.

D.14 **Mass Emission Limitations**: Mass emissions for each equipment item (i.e., emissions unit) associated with the South Cuyama Unit shall not exceed the values listed in Table 5.1-3. Emissions for the entire facility shall not exceed the total limits listed in Table 5.2.

D.15 **Operation/Throughput Limitations:** The South Cuyama Unit shall not exceed the following throughput limitations:

Oil Production (dry): 2,000 bbl/day

Note: Calculated as monthly production volume divided by the number of production days.

D.16 **Process Stream Sampling and Analysis:** The permittee shall sample and analyze the process streams listed in Section 4.9 of this permit consistent with the requirements of that section. All process stream samples shall be taken according to APCD-approved ASTM methods and must

follow traceable chain of custody procedures. Crude oil samples shall be obtained from an active flow line into each tank, or from the tank provided there is an active flow of crude into the tank.

D.17 **Process Monitoring Systems - Operation and Maintenance:** All facility process monitoring devices listed in Section 4.8 shall be properly operated and maintained according to manufacturer recommended specifications and the APCD approved Process *Monitor Calibration and Maintenance Plan.*

D.18 **Recordkeeping:** All records and logs required by this permit and any applicable APCD, state or federal rule or regulation shall be maintained for a minimum of five calendar years at the facility. These records or logs shall be readily accessible and be made available to the APCD upon request. In addition to any other recordkeeping requirements the following records shall be maintained:

(a) The volume of oil produced each month and the number of days that oil was produced through the tank farms. On an annual basis, the API gravity and true vapor pressure, calculated at the maximum expected storage temperature of the stored crude oil in each storage tank shall be recorded according to the test methods described in Rule 325.G. The calculated true vapor pressure shall be based on the maximum expected operating temperature for each crude oil storage tank. This temperature shall also be recorded at the time of API gravity and Reid vapor pressure tests.

(b) The quantity of gaseous fuel burned each month on the property and sulfur content measurements (H_2S) when detector tube sampling is required during Southern California Gas sulfur analyzer alarms or downtime.

(c) On an annual basis, the amount of coatings and petroleum products (solvents) used. This information must be logged for each coating or solvent. The log shall list (for each material) the quantity of material used, the VOC/ROC content, whether the material is photochemically reactive per the definition of Rule 102.FF, and whether the material was applied to a surface or disposed of. A Material Safety Data Sheet (MSDS), or other product specification sheet, which specifies the VOC content of the material, shall be maintained with the log.

(d) True vapor pressure measurements calculated at the maximum expected storage temperature at the initial storage tank entry point of the stored crude oil in each storage tank located at the Machader and Perkins Wastewater handling facilities according to the test methods described in Rule 325.G. The calculated true vapor pressure shall be based on the maximum expected operating temperature for each crude oil storage tank. This temperature shall also be recorded at the time of API gravity and Reid vapor pressure tests. Sampling of crude oil shall be obtained completed per Condition 9.D.16.

D.19 **Odorous Organic Sulfides (Rule 310):** The permittee shall not discharge into atmosphere H_2S and organic sulfides that result in a ground level impact beyond the stationary source property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. [*Re: APCD Rule 310*]

D.20 **Annual Compliance Verification Reports:** The permittee shall submit a report to the APCD, by March 1st of each year containing the information listed below and shall document compliance with all applicable permit requirements. These reports shall be in a format approved by the

APCD. All logs and other basic source data not included in the report shall be available to the APCD upon request. Pursuant to Rule 212, a completed *APCD Annual Emissions Inventory Questionnaire* shall be included in the annual report or submitted electronically via the APCD website. The report shall include the following information:

(a) Oil processed through the tanks along with the number of days per month of production.

(b) Surface coating usage.

(c) API gravity, true vapor pressure and storage temperature of the oil.

(d) All fuel parameters (fuel use, fuel sulfur content and gross fuel heating value) for the external combustion devices, as specified in Condition 9.D.9.

(e) The annual emissions totals of all pollutants in tons per year for each emission unit and summarized for the entire facility.

D.21 **Documents Incorporated by Reference:** The documents listed below, including any APCD-approved updates thereof, are incorporated herein and shall have the full force and effect of a permit condition for this operating permit:

(a) *Generic Inspection and Maintenance Plan for Independent Operators* (dated January 14, 1993 and approved for Hallador January 21, 1993 and all subsequent approved updates).

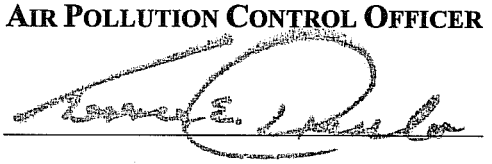
(b) *Tank Degassing Plan - Hallador Production Company (dated September 7, 1995 and approved by the APCD September 20, 1995).*

(c) *Fuel Use Monitoring Plan (dated September 16, 1993 and approved by the APCD March 24, 1994).*

(d) *Process Monitor Calibration and Maintenance Plan – Hallador Production Company (dated August 4, 2000 and approved August 16, 2000).*

(e) *Hallador Emergency Episode Plan approved March 3, 2000.*

AIR POLLUTION CONTROL OFFICER



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Date

NOTES:

a. This permit supersedes PTO 7250-R6 / Part 70 Permit 7250 issued June 14, 2005, PTO 11558 issued April 21, 2006, Part 70R 11199, ATC 12279 issued 06/22/07 and PTO Application 12279.
b. Permit Reevaluation Due Date: June 2011
c. Part 70 Operating Permit Expiration Date: June 2011

RECOMMENDATION

It is recommended that this PTO be issued with the conditions as specified in the permit.

Phil Sheehan	05/27/08	Brian Shafritz	5/30/08
AQ Engineer	Date	Engineering Supervisor	Date

10.0 Attachments

10.1 Emission Calculation Documentation

10.2 Emission Calculation Spreadsheets

10.3 Fee Statement

10.4 Equipment List

10.5 Comments on the Draft Permit and APCD Responses

10.1 EMISSION CALCULATION DOCUMENTATION - SOUTH CUYAMA UNIT:

This attachment contains all relevant emission calculation documentation used for the emission tables in Section 5. Refer to Section 4 for the general equations. Detailed calculation spreadsheets are attached as Attachment 10.2. The letters A-E refer to Tables 5.1-1 and 5.1-2.

Reference A - External Combustion Device (Perkins Tank Heater)

- The maximum operating schedule is in units of hours

- The gaseous fuel default characteristics are:
  - ⇒ HHV = 1,050 Btu/scf
  - ⇒ Fuel S = 796 ppmvd as H_2S for all equipment
    = 846 ppmvd as S
  - ⇒ Emission factors, shown below, are based on APCD Boiler Calculation Worksheet Version 6.0

NOx	ROC	CO	SOX	PM	PM10	Units
0.098	0.0054	0.0824	0.1361	0.0075	0.0075	lb/MMBtu

SO_2 emission factor is based on mass balance equation, based on fuel S. Thus:

⇒ SO_2 (lb/MMBtu) = 0.169 lb SO_2/scf of H_2S * 1/HHV * (ppmvd S in fuel)

Reference B – Petroleum Storage Tanks

The hourly/daily/annual emissions for the petroleum storage tanks is based on USEPA AP-42 Chapter 7, Liquid Storage Tanks (5th Edition, 2/96)

Reference C -- Wastewater Tanks, Sumps and Well Cellars

- The maximum operating schedule is in units of hours;

- Emission calculation methodology based on the CARB/KVB report *Emission Characteristics of Crude Oil Production Operations in California (1/83)*;

- Calculations are based on surface area of emissions noted in the inspector's report;

- The THC Speciation is based on CARB profiles # 529, 530, 531, 532; the ROC/TOC ratio is based on the APCD's guideline *"VOC/ROC Emission Factors and Reactivities for Common Source Types"* Table dated 4/2/97 (version 1.0).

Reference D - Components Emitting Fugitive ROCs

- Emission factors are based on the *APCD P&P 6100.060* guidelines.
- In determining the facility model using the CARB/KVB methodology for fugitive emissions, a default Gas Oil Ratio of 501 scf/bbl was used. This value assumes the worst case model
- An 80% reduction in fugitive emissions was assumed due to the implementation of a fugitive inspection and maintenance plan pursuant to Rule 331.

Reference E -- Solvents

All solvent and coating emissions are calculated on a mass balance basis. The emissions are based on the limits in PTO 7250-R6.

Reference F – Gas Station

The Gas Station emissions are calculated based on the APCD Gas Station Permit Guideline Document, July 23, 1997.

10.2 Emission Calculation Spreadsheets

Available in APCD Administrative Files

10.3 Fee Statement

Fees for the permit reevaluation of PTO 7250 are based on Fee Schedule A of APCD Rule 210. The fees are detailed in the attached table.

FEE STATEMENT
PT-70/Reeval 07250 - R7
FID: 01074 South Cuyama Unit (SCU) / SSID: 01073

Santa Barbara County
Air Pollution Control District

Device Fee

Device No.	Device Name	Fee Schedule	Qty of Fee Units	Fee per Unit	Fee Units	Max or Min. Fee Apply?	Number of Same Devices	Pro Rate Factor	Device Fee	Penalty Fee?	Fee Credit	Total Fee per Device
101000	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	5	1.000	284.75	0.00	0.00	284.75
000587	Wash Tank	A6	52.500	3.26	Per 1000 gallons	No	1	1.000	171.15	0.00	0.00	171.15
000586	Stock Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000588	LACT Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000589	Test Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
101001	Vapor Recovery System	A2	7.500	29.53	Per total rated hp	No	1	1.000	221.48	0.00	0.00	221.48
000855	Wastewater Pits	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
000742	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101003	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
101004	Wastewater Pump	A2	50.000	29.53	Per total rated hp	No	1	1.000	1,476.50	0.00	0.00	1,476.50
101005	Wastewater Pump	A2	15.000	29.53	Per total rated hp	No	1	1.000	442.95	0.00	0.00	442.95
101002	LACT Unit	A2	7.500	29.53	Per total rated hp	No	1	1.000	221.48	0.00	0.00	221.48
104984	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
101007	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
105251	New Device	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101008	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
101010	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101009	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	5	1.000	284.75	0.00	0.00	284.75
105964	Wash Tank	A6	52.500	3.26	Per 1000 gallons	No	1	1.000	171.15	0.00	0.00	171.15
109943	Wash Tank	A6	210.000	3.26	Per 1000 gallons	No	1	1.000	684.60	0.00	0.00	684.60
105087	Wash Tank	A6	63.000	3.26	Per 1000 gallons	No	1	1.000	205.38	0.00	0.00	205.38
000596	LACT Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
000763	LACT Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92

000594	Test Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
101014	Vapor Recovery System	A2	25.000	29.53	Per total rated hp	No	1	1.000	738.25	0.00	0.00	738.25
000860	Wastewater Pits	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
000745	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101011	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
101012	Transfer Pump	A2	3.000	29.53	Per total rated hp	No	1	1.000	88.59	0.00	0.00	88.59
101013	LACT Unit	A2	10.000	29.53	Per total rated hp	No	1	1.000	295.30	0.00	0.00	295.30
101015	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
000616	Wash Tank	A6	26.250	3.26	Per 1000 gallons	No	1	1.000	85.58	0.00	0.00	85.58
000617	Stock Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
000766	Stock Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
000618	Test Tank	A6	21.000	3.26	Per 1000 gallons	No	1	1.000	68.46	0.00	0.00	68.46
000861	Pits	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
000746	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101016	Transfer Pump	A2	3.000	29.53	Per total rated hp	No	1	1.000	88.59	0.00	0.00	88.59
101017	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
101019	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
101020	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
101022	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101021	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
008302	Crude Oil Slop Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
101025	Vapor Recovery System	A2	7.500	29.53	Per total rated hp	No	1	1.000	221.48	0.00	0.00	221.48
000748	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
000863	Wastewater Pits	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
101023	Wastewater Transfer Pump	A2	15.000	29.53	Per total rated hp	No	1	1.000	442.95	0.00	0.00	442.95
101027	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101026	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
101028	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101029	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
101030	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101031	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
101032	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
101033	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
000611	Test Tank	A6	8.400	3.26	Per 1000 gallons	Min	1	1.000	56.58	0.00	0.00	56.58
000755	Wastewater Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101034	Transfer Pump	A2	3.000	29.53	Per total rated hp	No	1	1.000	88.59	0.00	0.00	88.59

000613	Wash Tank	A6	52.500	3.26	Per 1000 gallons	No	1	1.000	171.15	0.00	0.00	171.15
101035	Gas/Liquid Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101036	Gas/Liquid Separators	A1.a	1.000	56.95	Per equipment	No	3	1.000	170.85	0.00	0.00	170.85
000614	Stock Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000765	LACT Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000612	Test Tank	A6	42.000	3.26	Per 1000 gallons	No	1	1.000	136.92	0.00	0.00	136.92
101037	Vapor recovery system	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
000872	Wastewater Pits	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
000756	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101039	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
105253	LACT Unit	A2	10.500	29.53	Per total rated hp	No	1	1.000	310.07	0.00	0.00	310.07
000620	Oil Recovery Tank	A6	4.200	3.26	Per 1000 gallons	Min	1	1.000	56.58	0.00	0.00	56.58
000875	Wastewater Storage Tank	A6	210.000	3.26	Per 1000 gallons	No	1	1.000	684.60	0.00	0.00	684.60
101038	Wastewater Storage Tank	A6	126.000	3.26	Per 1000 gallons	No	1	1.000	410.76	0.00	0.00	410.76
000878	Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
000879	Machader Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101040	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
000631	Tank Heater	A3	1.000	427.25	Per 1 million Btu input	No	1	1.000	427.25	0.00	0.00	427.25
008303	Hot Water Tank	A6	21.000	3.26	Per 1000 gallons	No	1	1.000	68.46	0.00	0.00	68.46
000759	Wastewater Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000760	Wastewater Tank	A6	84.000	3.26	Per 1000 gallons	No	1	1.000	273.84	0.00	0.00	273.84
000762	Wastewater Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
000877	Wastewater Pit	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
000880	Wastewater Pit	A6	102.690	3.26	Per 1000 gallons	No	1	1.000	334.77	0.00	0.00	334.77
000881	Wastewater Pit	A6	201.930	3.26	Per 1000 gallons	No	1	1.000	658.29	0.00	0.00	658.29
000882	Wastewater Pit	A6	24.230	3.26	Per 1000 gallons	No	1	1.000	78.99	0.00	0.00	78.99
000883	Wastewater Pit	A6	88.830	3.26	Per 1000 gallons	No	1	1.000	289.59	0.00	0.00	289.59
101044	Transfer Pump	A2	7.500	29.53	Per total rated hp	No	1	1.000	221.48	0.00	0.00	221.48
101043	Wastewater Charge Pump	A2	10.000	29.53	Per total rated hp	No	1	1.000	295.30	0.00	0.00	295.30
101041	Pit Pump	A2	10.000	29.53	Per total rated hp	No	1	1.000	295.30	0.00	0.00	295.30

101042	Pit Pump	A2	5.000	29.53	Per total rated hp	No	1	1.000	147.65	0.00	0.00	147.65
000738	Oil and Gas Wellheads	A1.a	1.000	56.95	Per equipment	No	225	1.000	12,813.75	0.00	0.00	12,813.75
101050	Valves & Fittings	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
	Device Fee Sub-Totals =								**$30,951.59**	**$0.00**	**$0.00**	
	Device Fee Total =											**$30,951.59**

Permit Fee

Fee Based on Devices **30,951.59**

Fee Statement Grand Total = $30,951

Notes:

(1) Fee Schedule Items are listed in APCD Rule 210, Fee Schedule "A".

(2) The term "Units" refers to the unit of measure defined in the Fee Schedule.

10.4 Equipment List

Wednesday, April 09, 2008
Santa Barbara County APCD – Equipment List

PT-70/Reeval 07250 R7 / FID: 01074 South Cuyama Unit (SCU) / SSID: 01073

A PERMITTED EQUIPMENT

1 Tank Farm #2

1.1 Gas/Liquid Separators

Device ID #	**101000**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball trap type, five (5), each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

1.2 Wash Tank

Device ID #	**000587**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	1250.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	M1235
Location Note			
Device Description	21.5 feet in diameter by 20 feet high, unheated, connected to a vapor recovery system.		

1.3 Stock Tank

Device ID #	**000586**	***Device Name***	**Stock Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	M2098
Location Note			
Device Description	29.7 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

1.4 LACT Tank

Device ID #	**000588**	***Device Name***	**LACT Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	

Model		*Serial Number*	M2100
Location Note			
Device Description	29.7 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

1.5 Test Tank

Device ID #	**000589**	***Device Name***	**Test Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	M1236
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

1.6 Vapor Recovery System

Device ID #	**101001**	***Device Name***	**Vapor Recovery System**
Rated Heat Input		*Physical Size*	7.50 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	
Model	67	*Serial Number*	18184K
Location Note			
Device Description	Vapor recovered by a compressor servicing the following areas and equipment of the facility with 95% VR efficiency for the Wash Tank, LACT Tank, Stock Tank and Test Tank at TF#2. Driven by 7.5 hp electric motor.		

1.7 Wastewater Pits

Device ID #	**000855**	***Device Name***	**Wastewater Pits**
Rated Heat Input		*Physical Size*	18.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, each with a surface area of 9 SF.		

1.8 Pit

Device ID #	**000742**	***Device Name***	**Pit**
Rated Heat Input		*Physical Size*	81.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, three sections, with a combined surface area of 81 SF.		

1.9 Pit Pump

Device ID #	**101003**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 5 hp electric motor.		

1.10 Wastewater Pump

Device ID #	**101004**	***Device Name***	**Wastewater Pump**
Rated Heat Input		*Physical Size*	50.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 50 hp electric motor.		

1.11 Wastewater Pump

Device ID #	**101005**	***Device Name***	**Wastewater Pump**
Rated Heat Input		*Physical Size*	15.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

1.12 LACT Unit

Device ID #	**101002**	***Device Name***	**LACT Unit**
Rated Heat Input		*Physical Size*	7.50 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

2 Tank Farm #3

2.1 Gas/Liquid Separators

Device ID #	**104984**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball traps, three (3), each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

3 Tank Farm #4

3.1 Gas/Liquid Separators

Device ID #	**101007**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball traps, three (3), each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

3.2 New Device

Device ID #	**105251**	***Device Name***	**New Device**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, 10 feet high by 24 inches in diameter, connected to the gas gathering system. This separator receives the NGL production from Gas Plant 10. This separator sends the NGL liquids to tank farm 6 where they are added into the produced crude oil.		

4 Tank Farm #5

4.1 Gas/Liquid Separators

Device ID #	**101008**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, three (3), each 14 feet high by 3 feet in diameter, connected to the gas gathering system.		

5 Tank Farm #6

5.1 Gas/Liquid Separator

Device ID #	**101010**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer	Superior Tank Co.	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Spherical, 48 inches in diameter, connected to the gas gathering system.		

5.2 Gas/Liquid Separators

Device ID #	**101009**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer	American Pipe & Steel Co.	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, each 14 feet high by 3 feet in diameter, connected to the gas gathering system.		

5.3 Wash Tank

Device ID #	**105964**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	1250.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	21.5 feet in diameter by 20 feet high, unheated, connected to a vapor recovery system.		

5.4 Wash Tank

Device ID #	**109943**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	5000.00 BBL
Manufacturer	Superior Tank Company	*Operator ID*	
Model		*Serial Number*	
Location Note	West side of the 1,000 bbl LACT tank at Perkins Tank Battery #6.		
Device Description	38.6 feet in diameter by 24 feet high, connected to the vapor recovery system.		

5.5 Wash Tank

Device ID #	**105087**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	1500.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	The tank is 21.5 feet in diameter by 24 feet high, unheated, connected to a vapor recovery system. Color: tan.		

5.6 LACT Tank

Device ID #	**000596**	***Device Name***	**LACT Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1260
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

5.7 LACT Tank

Device ID #	**000763**	***Device Name***	**LACT Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	R30352
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

5.8 Test Tank

Device ID #	**000594**	***Device Name***	**Test Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1203
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

5.9 Vapor Recovery System

Device ID #	**101014**	***Device Name***	**Vapor Recovery System**
Rated Heat Input		*Physical Size*	25.00 Horsepower (Electric

			Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	
Model	ES-1GAS	*Serial Number*	85334
Location Note			
Device Description	Vapor recovered by a compressor servicing the Wash Tank, Test Tank and LACT Tanks at TF#6 efficiency of 95% by weight. Powered by 25 hp electric motor.		

5.10 Wastewater Pits

Device ID #	**000860**	***Device Name***	**Wastewater Pits**
Rated Heat Input		*Physical Size*	18.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, each with a surface area of 9 SF.		

5.11 Pit

Device ID #	**000745**	***Device Name***	**Pit**
Rated Heat Input		*Physical Size*	126.00 Square Feet Pit Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, with a surface area of 126 SF.		

5.12 Pit Pump

Device ID #	**101011**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Located at Tank Farm #6.		

5.13 Transfer Pump

Device ID #	**101012**	***Device Name***	**Transfer Pump**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Roper	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

5.14 LACT Unit

Device ID #	**101013**	***Device Name***	**LACT Unit**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Equipped with a Worthington centrifugal charge pump.		

6 Tank Farm #7 (Hibbard)

6.1 Gas/Liquid Separator

Device ID #	**101015**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, 12 feet long by 2.5 feet in diameter, connected to the gas gathering system.		

6.2 Wash Tank

Device ID #	**000616**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	625.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	15.40 feet in diameter by 20 feet high, unheated, connected to a vapor recovery system.		

6.3 Stock Tank

Device ID #	**000617**	***Device Name***	**Stock Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1372
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

6.4 Stock Tank

Device ID #	**000766**	***Device Name***	**Stock Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1371
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

6.5 Test Tank

Device ID #	**000618**	***Device Name***	**Test Tank**
Rated Heat Input		*Physical Size*	500.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	15.40 feet in diameter by 16 feet high, unheated, connected to a vapor recovery system.		

6.6 Vapor Recovery System

Device ID #	**101018**	***Device Name***	**Vapor Recovery System**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Formerly served Tank Farm #7 (Hibbard).		

6.7 Pits

Device ID #	**000861**	***Device Name***	**Pits**
Rated Heat Input		*Physical Size*	9.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, each with a surface area of 9 SF.		

6.8 Pit

Device ID #	**000746**	***Device Name***	**Pit**

Rated Heat Input		*Physical Size*	90.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, with a combined surface area of 90 SF.		

6.9 Transfer Pump

Device ID #	**101016**	***Device Name***	**Transfer Pump**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 3 hp electric motor.		

6.10 Pit Pump

Device ID #	**101017**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 5 hp electric motor.		

7 Tank Farm #8

7.1 Gas/Liquid Separators

Device ID #	**101019**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, each 14 feet high by 3 feet in diameter, connected to the gas gathering system.		

7.2 Gas/Liquid Separators

Device ID #	**101020**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	

Location Note	
Device Description	Double ball trap type, each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.

8 Tank Farm #10

8.1 Gas/Liquid Separator

Device ID #	**101022**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, 14 feet high by 3 feet in diameter, connected to the gas gathering system.		

8.2 Gas/Liquid Separators

Device ID #	**101021**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball trap type, each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

8.3 Crude Oil Slop Tank

Device ID #	**008302**	***Device Name***	**Crude Oil Slop Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	30359
Model		*Serial Number*	30359
Location Note			
Device Description	Diameter of 29.7 feet and a height of 16 feet, located at tank farm #10, vented to a vapor recovery system		

8.4 Vapor Recovery System

Device ID #	**101025**	***Device Name***	**Vapor Recovery System**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Equipped with a 7.5 hp Ingersoll-Rand compressor servicing all the tanks at Tank Farm 10 with a 95% vapor recovery efficiency at each recovery point.		

8.5 Pit

Device ID #	**000748**	***Device Name***	**Pit**
Rated Heat Input		*Physical Size*	99.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, with a combined surface area of 99 SF.		

8.6 Wastewater Pits

Device ID #	**000863**	***Device Name***	**Wastewater Pits**
Rated Heat Input		*Physical Size*	9.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Two concrete lined, each with a surface area of 9 SF.		

8.7 Wastewater Transfer Pump

Device ID #	**101023**	***Device Name***	**Wastewater Transfer Pump**
Rated Heat Input		*Physical Size*	15.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Driven by a 15 hp elec. motor.		

9 Tank Farm #12

9.1 Gas/Liquid Separator

Device ID #	**101027**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, 10 feet high by 3 feet in diameter, connected to the gas gathering system.		

9.2 Gas/Liquid Separators

Device ID #	**101026**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball trap type, each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

10 Tank Farm #13

10.1 Gas/Liquid Separator

Device ID #	**101028**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Spherical, 60 inches in diameter, connected to the gas gathering system.		

10.2 Gas/Liquid Separators

Device ID #	**101029**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Vertical, each 10 feet long by 36 inches in diameter, connected to the gas gathering system.		

11 Tank Farm #14

11.1 Gas/Liquid Separator

Device ID #	**101030**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer	Superior Tank Co.	*Operator ID*	
Model	41 D 600	*Serial Number*	
Location Note			
Device Description	Double-ball trap type, 10 feet high by 42 inches in diameter, connected to the gas gathering system.		

11.2 Gas/Liquid Separators

Device ID #	**101031**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer	American Pipe & Steel Co	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Horizontal, each 10 feet long by 30 inches in diameter, connected to the gas gathering system.		

12 Tank Farm #16

12.1 Gas/Liquid Separators

Device ID #	**101032**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer	Superior Tank Co.	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball trap type, each 16 feet high by 42 inches in diameter, connected to gas gathering system.		

13 Tank Farm #17

13.1 Gas/Liquid Separators

Device ID #	**101033**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer	Superior Tank Co.	*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Double ball trap type, each 10 feet high by 3 feet 2 inches in diameter, connected to the gas gathering system.		

13.2 Test Tank

Device ID #	**000611**	***Device Name***	**Test Tank**
Rated Heat Input		*Physical Size*	200.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	9 feet in diameter by 16 feet high, unheated, not connected to the vapor recovery system.		

13.3 Wastewater Pit

Device ID #	**000755**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	108.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined.		

13.4 Transfer Pump

Device ID #	**101034**	***Device Name***	**Transfer Pump**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Driven by a 3 horsepower electric motor.		

14 Tank Farm #18

14.1 Wash Tank

Device ID #	**000613**	***Device Name***	**Wash Tank**
Rated Heat Input		*Physical Size*	1250.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1264
Location Note			
Device Description	21.5 feet in diameter by 20 feet high, unheated, connected to the vapor recovery system.		

14.2 Gas/Liquid Separator

Device ID #	**101035**	***Device Name***	**Gas/Liquid Separator**
Rated Heat Input		*Physical Size*	
Manufacturer	Superior Tank Co.	*Operator ID*	
Model	48	*Serial Number*	
Location Note			
Device Description	Spherical, 48 inches in diameter, connected to the gas gathering system.		

14.3 Gas/Liquid Separators

Device ID #	**101036**	***Device Name***	**Gas/Liquid Separators**
Rated Heat Input		*Physical Size*	
Manufacturer	American Pipe & Steel Co.	*Operator ID*	

Model	36-103	*Serial Number*	
Location Note			
Device Description	Vertical, each 14 feet high by 3 feet in diameter, connected to the gas gathering system.		

14.4 Stock Tank

Device ID #	**000614**	***Device Name***	**Stock Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	2076
Location Note			
Device Description	29.7 feet in diameter by 16 feet high, unheated, connected to the vapor recovery system.		

14.5 LACT Tank

Device ID #	**000765**	***Device Name***	**LACT Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	2075
Location Note			
Device Description	29.7 feet in diameter by 16 feet high, unheated, connected to the vapor recovery system.		

14.6 Test Tank

Device ID #	**000612**	***Device Name***	**Test Tank**
Rated Heat Input		*Physical Size*	1000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	1202
Location Note			
Device Description	21.5 feet in diameter by 16 feet high, unheated, connected to the vapor recovery system. Color: Tan		

14.7 Vapor recovery system

Device ID #	**101037**	***Device Name***	**Vapor recovery system**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	
Model	67X7	*Serial Number*	
Location Note			
Device Description	Vapor recovered by a compressor servicing the wash tank, the LACT tank, the stock		

tank and test tank at TF#18 with a 95% control efficiency. Powered by 5 hp electric motor.

14.8 Wastewater Pits

Device ID #	**000872**	***Device Name***	**Wastewater Pits**
Rated Heat Input		*Physical Size*	9.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, each with a surface area 9 SF.		

14.9 Pit

Device ID #	**000756**	***Device Name***	**Pit**
Rated Heat Input		*Physical Size*	117.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	concrete lined, surface area 117 ft2.		

14.10 Pit Pump

Device ID #	**101039**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 5 hp electric motor.		

14.11 LACT Unit

Device ID #	**105253**	***Device Name***	**LACT Unit**
Rated Heat Input		*Physical Size*	10.50 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	LACT unit served by two electric motor driven pumps: a 7.5 Horsepower Charge Pump and a 3.0 Horsepower Sample Pump		

15 Machader Wastewater Plant

15.1 Oil Recovery Tank

Device ID #	**000620**	***Device Name***	**Oil Recovery Tank**
Rated Heat Input		*Physical Size*	100.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	6713
Location Note			
Device Description	9 feet in diameter by 8 feet high, unheated, not connected to the vapor recovery system.		

15.2 Wastewater Storage Tank

Device ID #	**000875**	***Device Name***	**Wastewater Storage Tank**
Rated Heat Input		*Physical Size*	5000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	38.6 feet in diameter by 24 feet high, unheated, not connected to the vapor recovery system.		

15.3 Wastewater Storage Tank

Device ID #	**101038**	***Device Name***	**Wastewater Storage Tank**
Rated Heat Input		*Physical Size*	3000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	29.7 feet in diameter by 24 feet high, unheated, not connected to the vapor recovery system.		

15.4 Pit

Device ID #	**000878**	***Device Name***	**Pit**
Rated Heat Input		*Physical Size*	150.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete construction.		

15.5 Machader Pit

Device ID #	**000879**	***Device Name***	**Machader Pit**

Rated Heat Input		*Physical Size*	3000.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	This is an emergency overflow containment pit connected by pipeline to Pit 000878.		

15.6 Pit Pump

Device ID #	**101040**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Driven by 5 hp electric motor.		

16 Perkins Wastewater Plant

16.1 Tank Heater

Device ID #	**000631**	***Device Name***	**Tank Heater**
Rated Heat Input	1.000 MMBtu/Hour	*Physical Size*	
Manufacturer	BS&B	*Operator ID*	
Model	70 SSH	*Serial Number*	32-34-010-00
Location Note			
Device Description	Located at the Perkins WW Plant.		

16.2 Hot Water Tank

Device ID #	**008303**	***Device Name***	**Hot Water Tank**
Rated Heat Input		*Physical Size*	500.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	15.4 feet in diameter by 16 feet high, not connected to the vapor recovery system.		

16.3 Wastewater Tank

Device ID #	**000759**	***Device Name***	**Wastewater Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			

Device Description	29.7 feet in diameter by 16 feet high, unheated, not connected to a vapor recovery system.

16.4 Wastewater Tank

Device ID #	**000760**	***Device Name***	**Wastewater Tank**
Rated Heat Input		*Physical Size*	2000.00 BBL
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	29.7 feet in diameter by 16 feet high, unheated, not connected to a vapor recovery system.		

16.5 Wastewater Pit

Device ID #	**000762**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	45.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined, surface area 45 SF.		

16.6 Wastewater Pit

Device ID #	**000877**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	9.00 Square Feet Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Concrete lined.		

16.7 Wastewater Pit

Device ID #	**000880**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	1980.00 Square Feet Pit Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Earthen construction, gunite lined, 6 feet deep, 2,115 bbl capacity.		

16.8 Wastewater Pit

Device ID #	**000881**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	4500.00 Square Feet Pit Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Earthen construction, gunite lined, 6 feet deep, 4,808 bbl capacity.		

16.9 Wastewater Pit

Device ID #	**000882**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	540.00 Square Feet Pit Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Earthen construction, gunite lined, 6 feet deep, 577 bbl capacity.		

16.10 Wastewater Pit

Device ID #	**000883**	***Device Name***	**Wastewater Pit**
Rated Heat Input		*Physical Size*	1800.00 Square Feet Pit Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Earthen construction, gunite lined, 6 feet deep, 2,115 bbl capacity.		

16.11 Transfer Pump

Device ID #	**101044**	***Device Name***	**Transfer Pump**
Rated Heat Input		*Physical Size*	7.50 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 7.5 hp electric motor.		

16.12 Wastewater Charge Pump

Device ID #	**101043**	***Device Name***	**Wastewater Charge Pump**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric

			Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 10 hp electric motor.		

16.13 Pit Pump

Device ID #	**101041**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 10 hp electric motor.		

16.14 Pit Pump

Device ID #	**101042**	***Device Name***	**Pit Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Powered by 5 hp electric motor.		

17 O&G Wells, Cellars and Unassociated Valves & Flanges

17.1 Oil and Gas Wellheads

Device ID #	**000738**	***Device Name***	**Oil and Gas Wellheads**
Rated Heat Input		*Physical Size*	220.00 Total Wells
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Well count based on data from the California DOG&GR website.		

17.2 Valves & Fittings

Device ID #	**101050**	***Device Name***	**Valves & Fittings**
Rated Heat Input		*Physical Size*	206.00 Active Wells
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			

Device Description	Valves, fittings and flanges, not directly associated with other permitted equipment items, which emit fugitive hydrocarbon emissions.

17.3 Well Cellars

Device ID #	**000740**	***Device Name***	**Well Cellars**
Rated Heat Input		*Physical Size*	5825.00 Square Feet Cellar Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Each cellar is 6 feet in diameter (28.27 SF each).		

18 Gas Station

18.1 Underground Gasoline Storage Tank

Device ID #	**101045**	***Device Name***	**Underground Gasoline Storage Tank**
Rated Heat Input		*Physical Size*	12000.00 Gallons
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

18.2 Dual Product Gasoline Dispensing Cabinet

Device ID #	**101047**	***Device Name***	**Dual Product Gasoline Dispensing Cabinet**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Equipped with one gasoline dispensing nozzle.		

18.3 Phase I Vapor Recovery System

Device ID #	**101046**	***Device Name***	**Phase I Vapor Recovery System**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	OPW coaxial (CARB Executive Order Number G-70-97-A).		

18.4 Phase II Vapor Recovery System

Device ID #	**101048**	***Device Name***	**Phase II Vapor Recovery System**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	EMCO Wheaton Balance-Type (CARB executive order number G-70-17-AB.		

19 Misc Solvent Use

Device ID #	**104998**	***Device Name***	**Misc Solvent Use**
Rated Heat Input		*Physical Size*	5000.00 Gallons
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

B EXEMPT EQUIPMENT

1 Abrasive Blasting Unit

Device ID #	**101053**	***Device Name***	**Abrasive Blasting Unit**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.H.3 Portable Abrasive Blast Equipment	
Location Note			
Device Description			

2 Storage of Drums of Lubrication Oils

Device ID #	**101054**	***Device Name***	**Storage of Drums of Lubrication Oils**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	

Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description			

3 Storage of Oils with IBP 300° F or Greater

Device ID #	**101057**	***Device Name***	**Storage of Oils with IBP 300° F or Greater**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.1 Unheat Storage Of Lqd Org Mtls W/Bp >=300 @ 1 Atm
Location Note			
Device Description			

4 Painting and Solvent Use for Maintenance

Device ID #	**101058**	***Device Name***	**Painting and Solvent Use for Maintenance**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.4 Storage Of Org Lqds Except Gasoline <=1500 Gal
Location Note			
Device Description			

10.5 Comments on the Draft Permit and APCD Responses

The following comments were received in an April 1, 2008 letter from John Deacon of Tracer-EST Inc. in behalf of E&B Natural Resources Management. Each comment is followed by the APCD's response.

1. Page 2 of 57, Figure 1.1 - Delete Halador and replace with E&B.

APCD The APCD will look into updating the map, but it may not be possible prior to the issuance of this permit. This is due to the timelines the APCD must meet to issue the permit.

2. Page5 of57 - Why was the total number of wells reduced to 219?

APCD The update was based on California DOG&GR records on their website. Per the 04/04/08 email from Greg Hauser of Tracer, the number has been updated to 220.

3. Page 5 of 57, Section 1.3 should "Section 10.6" be changed to "Attachment 10.4" (based upon the format of the existing permit)?

APCD References to Section 10.6 for the equipment list have been changed to Section 10.4 throughout the permit.

4. Page 6 of 57, Section 1.6.2, should "Attachment 10.6" be changed to "Attachment 10.4" (based upon the format of the existing permit)?

APCD Change made as requested.

5. Page 8 of 57 - Why was the total number of wells reduced to 219 in Section 2.1 and 2.1.1? Also, in Section 2.1.1, E&B would prefer that the well count not be categorized into producers and shut-in. This number can vary substantially and therefore be misleading.

APCD The number of active versus shut-in wells gives the reader an idea of the scope of E&B's operation and is not an enforceable part of the permit. Also, see response to Item #2.

6. Page 9 of 57, Section 2.6, should "Attachment 10.5" be changed to "Attachment 10.4" (based upon the format of the existing permit)?

APCD References to Section 10.5 for the equipment list have been changed to Section 10.4 throughout the permit.

7. Page 10 of 57, Section 3.1, first bulleted item, delete the second "Section D.6" since it is redundant.

APCD Change made as requested.

8. Page 10 of 57, second bulleted item, should "Section 10.7" be changed to "Attachment 10.4" (based upon the format of the existing permit)?

APCD Clarification made as requested.

9. Page 12 of 57, Section 3.2.6, change "October 1, 2004" to "December 14, 2007".

APCD Change made as requested.

10. Page 12 of57, Section 3.4.2, Rule 201 discussion should both instances of "Attachment 10.7 be changed to "Attachment 10.4" (based upon the format of the existing permit)?

APCD Change made as requested.

11. Page 17 of 57, Table 3.1, should the row with Rule 310 be deleted (it was deleted from the draft PTO 9136-R5)?

APCD This reference is applicable since hydrogen sulfide is a byproduct of oil production.

12. Page 23 of 57, Section 4.5.3, unable to locate a diesel engine #29 in PTO 8010. Is this the correct engine number?

APCD The reference was changed to ID# 6404, the portable diesel air compressor.

13. Table 5.1-3, Device ID 105964, should the ATC reference be 11558 instead of 10954?

APCD ATC 10954 is appropriate as it is for the introduction of NGLs into the tank battery and changed the vapor pressure of crude processed at Tank Battery #6. ATC 11588 was issued for a new wash tank only (ID# 105964) and its reference has been updated.

14. Table 5.1-3, Device ID 105964, should the ATC reference be 11558 instead of 10954?

APCD See response #13.

15. Table 5-2-We were not able to calculate the same ROC values in A, B, C and D. Was the reduction due to the reduction in the number of wells?

APCD The fugitive hydrocarbon emissions are based on the CARB-KVB method that uses the well count to predict emissions. The emissions were updated based on the count of 220 wells. See Response #2 above.

16. Table 5-3-Again, we were unable to calculate the same ROC values in the tables. Could you please explain your methodology?

APCD A copy of the spreadsheet used to calculate fugitive hydrocarbon emissions will be included in the permit. Also, a copy will be emailed to you for your review.

17. Page 49 of 57, Section C.3, should the new device ID 109943 be added to the table since it is listed in Table 5.1-1?

APCD The 5,000 bbl wash tank was added to the table in Condition C.3 and Table 5.1 has been made consistent with this table for Tank Battery #6.

18. Page 52 of 57-Please note that E&B has filed for the requisite permits to remove this gasoline storage tank.

APCD Comment noted.

19. Equipment List, page 9 of26, Section 6.6, please verify the listing/status of Device 101018. The draft permit lists it in the Permitted Equipment section while the current permit (7250-R6) lists it in the De-Permitted Equipment section.

APCD *The equipment list has been updated to be consistent with the permit.*

20. Equipment List, page 12 of 26, Section 8.8, please verify the listing/status of Device 101024. The draft permit lists it in the Permitted Equipment section while the current permit (7250-R6) lists it in the De-Permitted Equipment section.

APCD *Ann error in the program that creates the equipment list carried over equipment items that have previously been de-permitted. This item has been removed from the permit and the fee statement. Since it was listed as de-permitted in PTO 7250-R6, it has been completely removed from the current equipment list.*

21. Equipment List, page 18 of 26, Section 15.1, please verify the listing/status of Device 000874. The draft permit lists it in the Permitted Equipment section while the current permit (7250-R6) lists it in the De-Permitted Equipment section.

APCD *See response #20 above.*

22. Equipment List, page 23 of 26, Section 17.1, please verify the physical size and description of device 000738 Oil and Gas Wellheads. Does it need to be updated to match Table 5.1-1 and the text in Section 2.1.1 (page 8 of 57)?

APCD *The number of wells has been updated to 220.*

23. Based upon the format of the existing R6 permit, draft permit R7 did not" appear to include the following in the Attachments: Attachment Table of Contents, Attachment 10.1 Emission Calculation Documentation, Attachment 10.2 title page.

APCD *These attachments will be included in the public draft of the permit. The key portions of the attachments, the emission calculations, the fee statement, and the equipment list were emailed to you with the draft permit.*

Table 5.0
Stationary Source Net Emissions Increase

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
PTO 7250-R5 - Issued April 3, 2002						
lbs/day	0.00	7.80	0.00	0.00	0.00	0.00
tons/year	0.00	1.42	0.00	0.00	0.00	0.00
PTO 10849 - Issued August 18, 2003 - Replace Tanks and Increase Throughput at Tank Farm #6						
lbs/day	0.00	3.11	0.00	0.00	0.00	0.00
tons/year	0.00	0.56	0.00	0.00	0.00	0.00
PTO 10954 - Issued August 18, 2003 - Add NGLs to Crude Oil at Tank Farm #6						
lbs/day	0.00	10.04	0.00	0.00	0.00	0.00
tons/year	0.00	1.84	0.00	0.00	0.00	0.00
PTO 10914 - Issued November 10, 2003 - A New Amine Unit at Gas Plant 10						
lbs/day	1.53	17.80	1.29	0.21	0.12	0.12
tons/year	0.28	3.25	0.23	0.04	0.02	0.02
PTO 11136 - Issued July 8, 2004 - Upgrade Gas Station Vapor Recovery						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11129 - Issued March 22, 2004 - Electrification of the Clark Compressors						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11558 - Issued April 21, 2006 - New 1,250 bbl Wash Tank at Tank Farm #6						
lbs/day	0.00	0.51	0.00	0.00	0.00	0.00
tons/year	0.00	0.09	0.00	0.00	0.00	0.00
PTO 11724 - Issued 10/19/05 - One Existing Diesel-fired Firewater Pump						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11759 - Issued 05/17/06 - One Existing Diesel-fired Portable Air Compressor						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 12284 - Issued 02/04/08 - Add Fuel/Air Controllers to Four Existing ICEs						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 12279 - Pending - New 5,000 bbl Wash Tank at Tank Farm #6						
lbs/day	0.00	1.65	0.00	0.00	0.00	0.00
tons/year	0.00	0.30	0.00	0.00	0.00	0.00
Total						
lbs/day	1.53	40.91	1.29	0.21	0.12	0.12
tons/year	0.28	7.46	0.23	0.04	0.02	0.02

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Table 5.1-1
Permit to Operate 7250-R7
E&B South Cuyama Unit
Equipment Discription

Equiment Category	Description	Device ID#	Feed	Parameter	Capacity	Units	Size	Units	Load	Hours Per day	Hours Per qtr	Hours Per year
				%S as H2S								
Ext. Combustion	Perkins: Hot Water Heater	000631	FG	0.0796	8,760	MMBtu/yr	1.000	MMBtu/hr	1	24	2,190	8,760
Fugitives	Valves and Fittings	101050	--		--		220	wells	1	24	2,190	8,760
	Pumps/Compressors and Wellheads	000738	--		--		220	wells	1	24	2,190	8,760
				TVP								
Tanks	TF #2: Stock Tank w/VRS	000586	O/W	2.64	0	bopd	2,000	Barrels	1	24	2,190	8,760
	TF #2: Wash Tank w/VRS	000587	O/W	2.64	588	bopd	1,250	Barrels	1	24	2,190	8,760
	TF #2: LACT Tank w/VRS	000588	O/W	2.64	400	bopd	2,000	Barrels	1	24	2,190	8,760
	TF #2: Test Tank w/VRS	000589	O/W	2.64	36	bopd	1,000	Barrels	1	24	2,190	8,760
	TF #6: Test Tank w/VRS	000594	O/W	2.64	36	bopd	1,000	Barrels	1	24	2,190	8,760
	TF #6: 1,500 bbl Wash Tank w/VRS	105087	O/W	8.00	1,000	bopd	1,500	Barrels	1	24	2,190	8,760
	TF #6: 1,250 bbl Wash Tank w/VRS	105964	O/W	8.00	1,250	bopd	1,250	Barrels	1	24	2,190	8,760
	TF #6: 5,000 bbl Wash Tank w/VRS	109943	O/W	8.00	1,250	bopd	50,001	Barrels	1	24	2,190	8,760
	TF #6: LACT Tank w/VRS	000596	O/W	8.00	1,000	bopd	1,000	Barrels	1	24	2,190	8,760
	TF #6: LACT Tank w/VRS	000763	O/W	8.00	1,000	bopd	1,000	Barrels	1	24	2,190	8,760
	Hibbard #7: Wash Tank w/VR	000616	O/W	2.64	353	bopd	625	Barrels	1	24	2,190	8,760
	Hibbard #7: Stock Tank w/VRS	000617	O/W	2.64	200	bopd	1,000	Barrels	1	24	2,190	8,760
	Hibbard #7: Test Tank w/VRS	000618	O/W	2.64	36	bopd	500	Barrels	1	24	2,190	8,760
	Hibbard #7: Stock Tank w/VRS	000766	O/W	2.64	200	bopd	1,000	Barrels	1	24	2,190	8,760
	TF #10: Crude Oil Slop Tank	008302	O/W	2.64	300	bopd	2,000	Barrels	1	24	2,190	8,760
	TF #17: Test Tank	000611	O/W	2.64	36	bopd	200	Barrels	1	24	2,190	8,760
	TF #18: Test Tank w/VRS	000612	O/W	2.64	36	bopd	1,000	Barrels	1	24	2,190	8,760
	TF #18: Wash Tank w/VRS	000613	O/W	2.64	588	bopd	1,250	Barrels	1	24	2,190	8,760
	TF #18: Stock Tank w/VRS	000614	O/W	2.64	0	bopd	2,000	Barrels	1	24	2,190	8,760
	TF #18: LACT Tank w/VRS	000765	O/W	2.64	400	bopd	2,000	Barrels	1	24	2,190	8,760
	Machader: Oil Recovery Tank	000620	O/W	0.5	50	bopd	100	Barrels	1	24	2,190	8,760
	Perkins: Hot Water Tank	008303	O/W	0.5	0	bopd	500	Barrels	1	24	2,190	8,760
				Service								
Pits, Well Cellars, Wastewater Tanks	TF #2: Pit	000742	O/W	tertiary	--	--	81	sq. feet	1	24	2,190	8,760
	TF #2: Wastewater Pits	000855	O/W	tertiary	--	--	18	sq. feet	1	24	2,190	8,760

Table 5.1-1
Permit to Operate 7250-R7
E&B South Cuyama Unit
Equipment Discription

Equiment Category	Description	Device ID#	Feed	Parameter	Capacity	Units	Size	Units	Load	Hours Per day	Hours Per qtr	Hours Per year
	TF #6: Wastewater Pit	000745	O/W	tertiary	--	--	126	sq. feet	1	24	2,190	8,760
	TF #6: Wastewater Pits	000860	O/W	secondary	--	--	18	sq. feet	1	24	2,190	8,760
	TF #7: Pits (Hibbard)	000861	O/W	secondary	--	--	18	sq. feet	1	24	2,190	8,760
	TF #7: Pit (Hibbard)	000746	O/W	tertiary	--	--	90	sq. feet	1	24	2,190	8,760
	TF #10: Pit	000748	O/W	tertiary	--	--	99	sq. feet	1	24	2,190	8,760
	TF #10: Wastewater Pits	000863	O/W	secondary	--	--	18	sq. feet	1	24	2,190	8,760
	TF #17: Pit	000755	O/W	tertiary	--	--	108	sq. feet	1	24	2,190	8,760
	TF #18: Wastewater Pits	000872	O/W	secondary	--	--	18	sq. feet	1	24	2,190	8,760
	TF #18: Pit	000756	O/W	tertiary	--	--	117	sq. feet	1	24	2,190	8,760
	Machader WWTP: Pit	000878	O/W	tertiary	--	--	150	sq. feet	1	24	2,190	8,760
	Machader WWTP: Pit	000879	O/W	tertiary	--	--	3,000	sq. feet	1	24	2,190	8,760
	Perkins WWTP: Pit	000880	O/W	tertiary	--	--	1,980	sq. feet	1	24	2,190	8,760
	Perkins WWTP: Pit	000881	O/W	tertiary	--	--	4,500	sq. feet	1	24	2,190	8,760
	Perkins WWTP: Pit	000882	O/W	tertiary	--	--	540	sq. feet	1	24	2,190	8,760
	Perkins WWTP: Pit	000883	O/W	tertiary	--	--	1,800	sq. feet	1	24	2,190	8,760
	Perkins: Wastewater Pit	000762	O/W	tertiary	--	--	45	sq. feet	1	24	2,190	8,760
	Perkins WWTP: Wastewater Pit	000877	O/W	tertiary	--	--	9	sq. feet	1	24	2,190	8,760
	Well Cellars	000740	O/W	primary	--	--	6,192	sq. feet	1	24	2,190	8,760
	Perkins: Wastewater Tank	000759	O/W	tertiary	--	--	693	sq. feet	1	24	2,190	8,760
	Perkins: Wastewater Tank	000760	O/W	tertiary	--	--	693	sq. feet	1	24	2,190	8,760
	Machader WWTP: Wastewater Tank	101038	O/W	tertiary	--	--	693	sq. feet	1	24	2,190	8,760
	Machader WWTP: Wastewater Tank	000875	O/W	tertiary	--	--	1,170	sq. feet	1	24	2,190	8,760
Gas Station	Gas Station	101045	--	--	36,000	gal/yr	12,000	gallons	1	24	2,190	8,760
Solvents	Solvents	104998	--	--	5,000	gal/year	5,000	gallons	1	24	2,190	8,760

Table 5.1-2
Permit to Operate 7250-R7
E&B South Cuyama Unit
Emission Factors

	Description	Device ID#	NOx	ROC	CO	SOX	PM	PM10	Units	References
Ext. Combustion	Perkins: Hot Water Heater	000631	0.0980	0.0054	0.0824	0.1361	0.0075	0.0075	lb/MMBtu	A
Fugitives	Valves and Fittings	101050	-		-	-	-	-		D
	Pumps/Compressors and Wellheads	000738	-		-	-	-	-		D
Tanks	TF #2: Stock Tank w/VRS	000586								B
	TF #2: Wash Tank w/VRS	000587								B
	TF #2: LACT Tank w/VRS	000588								B
	TF #2: Test Tank w/VRS	000589								B
	TF #6: Test Tank w/VRS	000594								B
	TF #6: 1,500 bbl Wash Tank w/VRS	105087								B
	TF #6: 1,250 bbl Wash Tank w/VRS	105964								B
	TF #6: 5,000 bbl Wash Tank w/VRS	109943								B
	TF #6: LACT Tank w/VRS	000596								B
	TF #6: LACT Tank w/VRS	000763								B
	Hibbard #7: Wash Tank w/VR	000616								B
	Hibbard #7: Stock Tank w/VRS	000617								B
	Hibbard #7: Test Tank w/VRS	000618		See Attached Worksheets for Emission Factors						B
	Hibbard #7: Stock Tank w/VRS	000766								B
	TF #10: Crude Oil Slop Tank	008302								B
	TF #17: Test Tank	000611								B
	TF #18: Test Tank w/VRS	000612								B
	TF #18: Wash Tank w/VRS	000613								B
	TF #18: Stock Tank w/VRS	000614								B
	TF #18: LACT Tank w/VRS	000765								B
	Machader: Oil Recovery Tank	000620								B
	Perkins: Hot Water Tank	008303								B
Pits, Well Cellars, Wastewater Tanks										
	TF #2: Pit	000742	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	TF #2: Wastewater Pits	000855	-	0.00870	-	-	-	-	lb/sq. ft./day	C

Table 5.1-2
Permit to Operate 7250-R7
E&B South Cuyama Unit
Emission Factors

	Description	Device ID#	NOx	ROC	CO	SOX	PM	PM10	Units	References
	TF #6: Wastewater Pit	000745	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	TF #6: Wastewater Pits	000860	-	0.01800	-	-	-	-	lb/sq. ft./day	C
	TF #7: Pits (Hibbard)	000861	-	0.01800	-	-	-	-	lb/sq. ft./day	C
	TF #7: Pit (Hibbard)	000746	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	TF #10: Pit	000748	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	TF #10: Wastewater Pits	000863	-	0.01800	-	-	-	-	lb/sq. ft./day	C
	TF #17: Pit	000755	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	TF #18: Wastewater Pits	000872	-	0.01800	-	-	-	-	lb/sq. ft./day	C
	TF #18: Pit	000756	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Machader WWTP: Pit	000878	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Machader WWTP: Pit	000879	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins WWTP: Pit	000880	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins WWTP: Pit	000881	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins WWTP: Pit	000882	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins WWTP: Pit	000883	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins: Wastewater Pit	000762	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Perkins WWTP: Wastewater Pit	000877	-	0.00870	-	-	-	-	lb/sq. ft./day	C
	Well Cellars	000740	-	0.04140	-	-	-	-	lb/sq. ft./day	C
	Perkins: Wastewater Tank	000759	-	0.00131	-	-	-	-	lb/sq. ft./day	C
	Perkins: Wastewater Tank	000760	-	0.00131	-	-	-	-	lb/sq. ft./day	C
	Machader WWTP: Wastewater Tank	101038	-	0.00131	-	-	-	-	lb/sq. ft./day	C
	Machader WWTP: Wastewater Tank	000875	-	0.00131	-	-	-	-	lb/sq. ft./day	C
Gas Station	Gas Station	101045	-	See Calculation Sheet in Section 10						F
Solvents	Solvents	104998	-	See Calculation Sheet in Section 10						E

Table 5.1-3
Permit to Operate 7250-R7
E&B South Cuyama Unit
Hourly and Daily Emissions

Equipment Category	Emissions Unit	Device ID #	NOx		ROC		CO		SOx		PM		PM10		Enforceability and its basis	
			lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day		
Ext. Combustion	Perkins: Hot Water Heater	000631	0.10	2.35	0.01	0.13	0.08	1.98	0.14	3.27	0.01	0.18	0.01	0.18	A	
Fugitives	Valves and Fittings	101050	-	-	7.72	185.17	-	-	-	-	-	-	-	-	A	
	Pumps/Compressors and Wellheads	000738	-	-	0.15	3.59	-	-	-	-	-	-	-	-	A	
Tanks	TF #2: Stock Tank w/VRS	000586	-	-	0.02	0.51	-	-	-	-	-	-	-	-	A	
	TF #2: Wash Tank w/VRS	000587	-	-	0.00	0.08	-	-	-	-	-	-	-	-	A	
	TF #2: LACT Tank w/VRS	000588	-	-	0.06	1.53	-	-	-	-	-	-	-	-	A	
	TF #2: Test Tank w/VRS	000589	-	-	0.02	0.43	-	-	-	-	-	-	-	-	A	
	TF #6: Test Tank w/VRS	000594	-	-	0.02	0.43	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: 1,500 bbl Wash Tank w/VRS	105087	-	-	0.02	0.51	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: 1,250 bbl Wash Tank w/VRS	105964	-	-	0.02	0.51	-	-	-	-	-	-	-	-	FE	ATC 11558
	TF #6: 5,000 bbl Wash Tank w/VRS	109943	-	-	0.07	1.65	-	-	-	-	-	-	-	-	FE	ATC 12279
	TF #6: LACT Tank w/VRS	000596	-	-	0.28	6.70	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: LACT Tank w/VRS	000763	-	-	0.28	6.70	-	-	-	-	-	-	-	-	FE	ATC 10954
	Hibbard #7: Wash Tank w/VR	000616	-	-	0.00	0.04	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Stock Tank w/VRS	000617	-	-	0.03	0.78	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Test Tank w/VRS	000618	-	-	0.01	0.30	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Stock Tank w/VRS	000766	-	-	0.03	0.78	-	-	-	-	-	-	-	-	A	
	TF #10: Crude Oil Slop Tank	008302	-	-	0.06	1.45	-	-	-	-	-	-	-	-	FE	ATC 9592
	TF #17: Test Tank	000611	-	-	0.12	2.90	-	-	-	-	-	-	-	-	FE	ATC 7250
	TF #18: Test Tank w/VRS	000612	-	-	0.02	0.43	-	-	-	-	-	-	-	-	A	
	TF #18: Wash Tank w/VRS	000613	-	-	0.05	1.17	-	-	-	-	-	-	-	-	A	
	TF #18: Stock Tank w/VRS	000614	-	-	0.02	0.51	-	-	-	-	-	-	-	-	A	
	TF #18: LACT Tank w/VRS	000765	-	-	0.02	0.51	-	-	-	-	-	-	-	-	A	
	Machader: Oil Recovery Tank	000620	-	-	0.01	0.16	-	-	-	-	-	-	-	-	A	
	Perkins: Hot Water Tank	008303	-	-	0.01	0.04	-	-	-	-	-	-	-	-	A	
	(1) Note: The emission limits are shared for tank pair 000614 and 000765 These limits includes breathing losses losses for both tanks															
Pits, Well Cellars, Wastewater Tanks	TF #2: Pit	000742	-	-	0.0294	0.70	-	-	-	-	-	-	-	-	A	
	TF #2: Wastewater Pits	000855	-	-	0.0065	0.16	-	-	-	-	-	-	-	-	A	
	TF #6: Wastewater Pit	000745	-	-	0.0457	1.10	-	-	-	-	-	-	-	-	A	
	TF #6: Wastewater Pits	000860	-	-	0.0135	0.32	-	-	-	-	-	-	-	-	A	

"A" denotes APCD-only enforceable conditions.
"FE" Denotes Federally-enforceable conditions.

Table 5.1-3
Permit to Operate 7250-R7
E&B South Cuyama Unit
Hourly and Daily Emissions

Equipment Category	Emissions Unit	Device ID #	NOx		ROC		CO		SOx		PM		PM10		Enforceability and its basis	
			lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day		
	TF #7: Pits (Hibbard)	000861	-	-	0.0135	0.32	-	-	-	-	-	-	-	-	A	
	TF #7: Pit (Hibbard)	000746	-	-	0.0326	0.78	-	-	-	-	-	-	-	-	A	
	TF #10: Pit	000748	-	-	0.0359	0.86	-	-	-	-	-	-	-	-	A	
	TF #10: Wastewater Pits	000863	-	-	0.0135	0.32	-	-	-	-	-	-	-	-	A	
	TF #17: Pit	000755	-	-	0.0392	0.94	-	-	-	-	-	-	-	-	A	
	TF #18: Wastewater Pits	000872	-	-	0.0135	0.32	-	-	-	-	-	-	-	-	A	
	TF #18: Pit	000756	-	-	0.0424	1.02	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Pit	000878	-	-	0.0544	1.31	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Pit	000879	-	-	1.0875	26.10	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000880	-	-	0.7178	17.23	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000881	-	-	1.6313	39.15	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000882	-	-	0.1958	4.70	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000883	-	-	0.6525	15.66	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Pit	000762	-	-	0.0163	0.39	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Wastewater Pit	000877	-	-	0.01	0.08	-	-	-	-	-	-	-	-	A	
	Well Cellars	000740	-	-	10.681	256.35	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Tank	000759	-	-	0.0378	0.91	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Tank	000760	-	-	0.0378	0.91	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Wastewater Tank	101038	-	-	0.0378	0.91	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Wastewater Tank	000875	-	-	0.0639	1.53	-	-	-	-	-	-	-	-	A	
Gas Station	Gas Station	101045	-	-	-	0.12	-	-	-	-	-	-	-	-	FE	ATC 11136
Solvents	Solvents	104998	-	-	0.23	5.57	-	-	-	-	-	-	-	-	A	

"A" denotes APCD-only enforceable conditions.
"FE" Denotes Federally-enforceable conditions.

Table 5.1-4
Permit to Operate 7250-R7
E&B South Cuyama Unit
Quarterly and Annual Emissions

Equipment Category	Emissions Unit	Device ID #	NOx TPQ	NOx TPY	ROC TPQ	ROC TPY	CO TPQ	CO TPY	SOx TPQ	SOx TPY	PM TPQ	PM TPY	PM10 TPQ	PM10 TPY	Fed. Enforceability and its basis	
Ext. Combustion	Perkins: Hot Water Heater	000631	0.11	0.43	0.01	0.02	0.09	0.36	0.15	0.60	0.01	0.03	0.01	0.03	A	
Fugitives	Valves and Fittings	101050	-	-	8.45	33.79	-	-	-	-	-	-	-	-	A	
	Pumps/Compressors and Wellheads	000738	-	-	0.16	0.65	-	-	-	-	-	-	-	-	A	
Tanks	TF #2: Stock Tank w/VRS	000586	-	-	0.02	0.09	-	-	-	-	-	-	-	-	A	
	TF #2: Wash Tank w/VRS	000587	-	-	0.00	0.01	-	-	-	-	-	-	-	-	A	
	TF #2: LACT Tank w/VRS	000588	-	-	0.07	0.28	-	-	-	-	-	-	-	-	A	
	TF #2: Test Tank w/VRS	000589	-	-	0.02	0.08	-	-	-	-	-	-	-	-	A	
	TF #6: Test Tank w/VRS	000594	-	-	0.02	0.08	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: 1,500 bbl Wash Tank w/VRS	105087	-	-	0.02	0.09	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: 1,250 bbl Wash Tank w/VRS	105964	-	-	0.02	0.09	-	-	-	-	-	-	-	-	FE	ATC 11558
	TF #6: 5,000 bbl Wash Tank w/VRS	109943	-	-	0.08	0.30	-	-	-	-	-	-	-	-	FE	ATC 12279
	TF #6: LACT Tank w/VRS	000596	-	-	0.31	1.22	-	-	-	-	-	-	-	-	FE	ATC 10954
	TF #6: LACT Tank w/VRS	000763	-	-	0.31	1.22	-	-	-	-	-	-	-	-	FE	ATC 10954
	Hibbard #7: Wash Tank w/VR	000616	-	-	0.00	0.01	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Stock Tank w/VRS	000617	-	-	0.04	0.14	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Test Tank w/VRS	000618	-	-	0.01	0.05	-	-	-	-	-	-	-	-	A	
	Hibbard #7: Stock Tank w/VRS	000766	-	-	0.04	0.14	-	-	-	-	-	-	-	-	A	
	TF #10: Crude Oil Slop Tank	008302	-	-	0.07	0.26	-	-	-	-	-	-	-	-	FE	ATC 9592
	TF #17: Test Tank	000611	-	-	0.13	0.53	-	-	-	-	-	-	-	-	FE	ATC 7250
	TF #18: Test Tank w/VRS	000612	-	-	0.02	0.08	-	-	-	-	-	-	-	-	A	
	TF #18: Wash Tank w/VRS	000613	-	-	0.05	0.21	-	-	-	-	-	-	-	-	A	
	TF #18: Stock Tank w/VRS	000614	-	-	0.02	0.09	-	-	-	-	-	-	-	-	A	
	TF #18: LACT Tank w/VRS	000765	-	-	0.02	0.09	-	-	-	-	-	-	-	-	A	
	Machader: Oil Recovery Tank	000620	-	-	0.01	0.03	-	-	-	-	-	-	-	-	A	
	Perkins: Hot Water Tank	008303	-	-	0.01	0.04	-	-	-	-	-	-	-	-	A	
	(1) Note: The emission limits are shared for Tank pairs (0596 and 0763) and (0614 and 0765) respectively.															
Pits, Well Cellars, Wastewater Tanks	TF #2: Pit	000742	-	-	0.03	0.13	-	-	-	-	-	-	-	-	A	
	TF #2: Wastewater Pits	000855	-	-	0.01	0.03	-	-	-	-	-	-	-	-	A	
	TF #6: Wastewater Pit	000745	-	-	0.05	0.20	-	-	-	-	-	-	-	-	A	
	TF #6: Wastewater Pits	000860	-	-	0.01	0.06	-	-	-	-	-	-	-	-	A	
	TF #7: Pits (Hibbard)	000861	-	-	0.01	0.06	-	-	-	-	-	-	-	-	A	
	TF #7: Pit (Hibbard)	000746	-	-	0.04	0.14	-	-	-	-	-	-	-	-	A	
	TF #10: Pit	000748	-	-	0.04	0.16	-	-	-	-	-	-	-	-	A	
	TF #10: Wastewater Pits	000863	-	-	0.01	0.06	-	-	-	-	-	-	-	-	A	
	TF #17: Pit	000755	-	-	0.04	0.17	-	-	-	-	-	-	-	-	A	
	TF #18: Wastewater Pits	000872	-	-	0.01	0.06	-	-	-	-	-	-	-	-	A	

"A" denotes APCD-only enforceable conditions.
"FE" Denotes Federally-enforceable conditions.

Table 5.1-4
Permit to Operate 7250-R7
E&B South Cuyama Unit
Quarterly and Annual Emissions

Equipment Category	Emissions Unit	Device ID #	NOx TPQ	NOx TPY	ROC TPQ	ROC TPY	CO TPQ	CO TPY	SOx TPQ	SOx TPY	PM TPQ	PM TPY	PM10 TPQ	PM10 TPY	Fed. Enforceability and its basis	
	TF #18: Pit	000756	-	-	0.05	0.19	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Pit	000878	-	-	0.06	0.24	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Pit	000879	-	-	1.19	4.76	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000880	-	-	0.79	3.14	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000881	-	-	1.79	7.14	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000882	-	-	0.21	0.86	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Pit	000883	-	-	0.71	2.86	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Pit	000762	-	-	0.02	0.07	-	-	-	-	-	-	-	-	A	
	Perkins WWTP: Wastewater Pit	000877	-	-	0.00	0.01	-	-	-	-	-	-	-	-	A	
	Well Cellars	000740	-	-	11.70	46.78	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Tank	000759	-	-	0.04	0.17	-	-	-	-	-	-	-	-	A	
	Perkins: Wastewater Tank	000760	-	-	0.04	0.17	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Wastewater Tank	101038	-	-	0.04	0.17	-	-	-	-	-	-	-	-	A	
	Machader WWTP: Wastewater Tank	000875	-	-	0.07	0.28	-	-	-	-	-	-	-	-	A	
Gas Station	Gas Station	101045	-	-	N/A	0.02	-	-	-	-	-	-	-	-	FE	11136
Solvents	Solvents	104998	-	-	0.26	1.02	-	-	-	-	-	-	-	-	A	

"A" denotes APCD-only enforceable conditions.
"FE" Denotes Federally-enforceable conditions.

Table 5.2
Permit to Operate 7250-R7
E&B South Cuyama Unit
Total Permitted Emissions

A. Hourly (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Ext. Combustion	0.10	0.01	0.08	0.14	0.01	0.01
Fugitives	-	7.87	-	-	-	-
Tanks	-	1.17	-	-	-	-
Pits, Well Cellars, Wastewater Tanks	-	15.51	-	-	-	-
Gas Station		-				
Solvents		0.23				
Totals	**0.10**	**24.79**	**0.08**	**0.14**	**0.01**	**0.01**

B. Daily (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Ext. Combustion	2.35	0.13	1.98	3.27	0.18	0.18
Fugitives	-	188.76	-	-	-	-
Tanks	-	28.12	-	-	-	-
Pits, Well Cellars, Wastewater Tanks	-	372.07	-	-	-	-
Gas Station		0.12				
Solvents		5.57				
Totals	**2.35**	**594.77**	**1.98**	**3.27**	**0.18**	**0.18**

C. Quarterly (Tons/Qtr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Ext. Combustion	0.11	0.01	0.09	0.15	0.01	0.01
Fugitives	-	8.61	-	-	-	-
Tanks	-	1.28	-	-	-	-
Pits, Well Cellars, Wastewater Tanks	-	16.98	-	-	-	-
Gas Station		0.01				
Solvents		0.26				
Totals	**0.11**	**26.87**	**0.09**	**0.15**	**0.01**	**0.01**

D. Annual (Ton/yr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Ext. Combustion	0.43	0.02	0.36	0.60	0.03	0.03
Fugitives	-	34.44	-	-	-	-
Tanks	-	5.13	-	-	-	-
Pits, Well Cellars, Wastewater Tanks	-	67.90	-	-	-	-
Gas Station		0.02				
Solvents		1.02				
Totals	**0.43**	**107.50**	**0.36**	**0.60**	**0.03**	**0.03**

Table 5.3
Permit to Operate 7250-R7
E&B South Cuyama Unit
Federal Potential to Emit

Federal PTE - Hourly (lbs/hr)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Ext. Combustion	0.10	0.01	0.08	0.14	0.01	0.01
Tanks	-	1.17	-	-	-	-
Gas Station	-	-	-	-	-	-
Solvents	-	0.23	-	-	-	-
Insignificant Emissions	0.00	0.06	0.00	0.00	0.27	0.27
Totals	**0.10**	**1.47**	**0.08**	**0.14**	**0.28**	**0.28**

Federal PTE - Daily (lbs/day)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Ext. Combustion	2.35	0.13	1.98	3.27	0.18	0.18
Tanks	-	28.12	-	-	-	-
Gas Station	-	0.12	-	-	-	-
Solvents	-	5.57	-	-	-	-
Insignificant Emissions	-	1.53	-	-	0.27	0.27
Totals	**2.35**	**35.47**	**1.98**	**3.27**	**0.45**	**0.45**

Federal PTE - Annual (Ton/yr)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Ext. Combustion	0.43	0.02	0.36	0.60	0.03	0.03
Tanks	-	5.13	-	-	-	-
Gas Station	-	0.02	-	-	-	-
Solvents	-	1.02	-	-	-	-
Insignificant Emissions	0.00	0.28	0.00	0.00	0.05	0.05
Totals	**0.43**	**6.47**	**0.36**	**0.60**	**0.08**	**0.08**

Table 5.4
Permit to Operate 7250-R7
E&B South Cuyama Unit
Hazardous Air Pollutant Emissions

HAP EMISSION FACTORS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Ext. Combustion	0.000005	0.000000	0.000002	0.000031	0.000018	lb/MMBtu	CATEF (1995) Factors for SCC# 3-10-004-04
Fugitives	0.000000	0.168831	0.003247	0.000000	0.000000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 757
Tanks	0.000000	0.052415	0.024666	0.014388	0.000000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 297
Pits, Well Cellars, Wastewater Tanks	0.000000	0.168831	0.003247	0.000000	0.000000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 757
Gas Station	0.000000	0.000120	0.000013	0.000000	0.000000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 710

DAILY HAP EMISSIONS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Ext. Combustion	0.00000	0.00000	0.00000	0.00003	0.00002	lb/day	CATEF (1995) Factors for SCC# 3-10-004-04
Fugitives	0.00000	31.86857	0.61286	0.00000	0.00000	lb/day	CA-ARB (1991) VOC Spec. Prof. 756
Tanks	0.00000	1.47392	0.69361	0.40460	0.00000	lb/day	CA-ARB (1991) VOC Spec. Prof. 297
Pits, Well Cellars, Wastewater Tanks	0.00000	62.81732	1.20803	0.00000	0.00000	lb/day	CA-ARB (1991) VOC Spec. Prof. 756
Gas Station	0.00000	0.00001	0.00000	0.00000	0.00000	lbs/day	CA-ARB (1991) VOC Spec. Prof. 710
Totals	**0.00000**	**96.15981**	**2.51449**	**0.40464**	**0.00002**	**lb/day**	

ANNUAL HAP EMISSIONS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Ext. Combustion	0.039595	0.000000	0.019535	0.269458	0.156016	tons/year	CATEF (1995) Factors for SCC# 3-10-004-04
Fugitives	0.000000	5.814545	0.111818	0.000000	0.000000	tons/year	CA-ARB (1991) VOC Spec. Prof. 756
Tanks	0.000000	0.268890	0.126536	0.073813	0.000000	tons/year	CA-ARB (1991) VOC Spec. Prof. 297
Pits, Well Cellars, Wastewater Tanks	0.000000	11.464161	0.220465	0.000000	0.000000	tons/year	CA-ARB (1991) VOC Spec. Prof. 756
Gas Station	0.000000	0.000002	0.000000	0.000000	0.000000	tons/year	CA-ARB (1991) VOC Spec. Prof. 710
Totals	**0.039595**	**17.547596**	**0.478354**	**0.343271**	**0.156016**	**tons/year**	

Note: The HAP emissions in these tables are estimates only and are not enforceable limits.